

Document of
The World Bank

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Report No: PAD459

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US\$120 MILLION

TO THE

STATE OF PIAUI

WITH THE GUARANTEE OF THE FEDERATIVE REPUBLIC OF BRAZIL

FOR A

PIAUI PILLARS OF GROWTH AND SOCIAL INCLUSION PROJECT

November 30, 2015

Education Global Practice
Environment & Natural Resources Global Practice
Latin America and the Caribbean Region

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CURRENCY EQUIVALENTS
(Exchange Rate Effective November 19, 2015)

Currency Unit = Brazilian Real (R\$)
R\$3.75 = US\$1.00

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

BFP	<i>Bolsa Família</i> Program
CDRU	Concessions of Real Rights of Use
CEPM	State Coordination of Policies for Women (<i>Coordenadoria Estadual de Políticas Para Mulheres do Piauí</i>)
CERH	State Water Resources Users Cadastre (<i>Cadastro Estadual de Recursos Hídricos</i>)
CGEO	State Land and Environmental Geotechnical Center (<i>Centro de Geotecnologia Fundiária e Ambiental</i>)
CGE-PI	Comptroller General of the State of Piauí (<i>Controladoria Geral do Estado do Piauí</i>)
CGJ	Office of the Inspector General of the State Secretariat of Justice (<i>Corregedoria Geral de Justiça do Poder Judiciário do Estado do Piauí</i>)
CNARH	National Water Resources Users Registry (<i>Cadastro Nacional de Usuários de Recursos Hídricos</i>)
CPS	Country Partnership Strategy
CQS	Selection Based on the Consultants' Qualifications
DA	Designated Account
DL	Procurement Department (<i>Diretoria de Licitações</i>)
DLI	Disbursement-Linked Indicator
DPL	Development Policy Loan
EEP	Eligible Expenditure Program
EMP	Environmental Management Plan
ESMF	Environmental and Social Management Framework
ETI	Education with Technological Intermediation
FBS	Selection under a Fixed Budget
FE	Fundamental Education
FHT	Family Health Team
FM	Financial Management
FTS	Full-Time School
GERCOG	Special Group for Land Tenure Regularization (<i>Grupo Especial de Regularização Fundiária e de Combate à Grilagem</i>)
GoPi	Government of Piauí
GRS	Grievance Redress Service

HWMP	Health Waste Management Plan
IA-CM	Internal Audit Capability Model for the public sector
IBGE	Federal Bureau of Geography and Statistics (<i>Instituto Brasileiro de Geografia e Estatísticas</i>)
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IFR	Interim Financial Report
INCRA	National Institute for Colonization and Agrarian Reform (<i>Instituto Nacional de Colonização e Reforma Agrária</i>)
INEP	National Institute of Education Research (<i>Instituto Nacional de Estudos e Pesquisas Educacionais</i>)
INTERPI	State Land Agency (<i>Instituto de Terras do Piauí</i>)
INTOSAI	International Organization of Supreme Audit Institutions
IPEA	Applied Economics Research Institute (<i>Instituto de Pesquisa Econômica Aplicada</i>)
IPF	Investment Project Financing
IRR	Internal Rate of Return
IPSAS	International Public Sector Accounting Standards
IVE	Independent Verification Entity
LCS	Least-Cost Selection
LOA	Annual Budget Law (<i>Lei Orçamentária Anual</i>)
LTRP	Land Tenure Regularization Program
MEC	Ministry of Education (<i>Ministerio da Educação</i>)
MTR	Mid-Term Review
NCB	National Competitive Bidding
NTD	Neglected Tropical Diseases
OGE	State Ombudsman's Office (<i>Ouvidoria-Geral do Estado do Piauí</i>)
OPM	Governamental Organizations of Policies for Women (<i>Organismos de Políticas para Mulheres</i>)
PDO	Project Development Objective
PEFA	Public Expenditure and Financial Accountability
PIP	Productive Investment Plan (<i>Plano de Investimento Produtivo</i>)
PIU	Project Implementation Unit
POM	Project Operational Manual
PPA	Multi-year Plan (<i>Plano Plurianual</i>)
PPEM	State Plan of Policies for Women
PROGERE	Program for Employment and Income Generation in Rural Areas (<i>Programa Estadual de Geração de Emprego e Renda no Meio Rural</i>)
QBS	Quality-Based Selection
QCBS	Quality- and Cost-Based Selection
RF	Results Framework
RPF	Resettlement Policy Framework
SCCD	Specialized Center for Chronic Diseases
SDR	State Secretariat of Rural Development (<i>Secretaria do Desenvolvimento Rural do Estado do Piauí</i>)
SE	Secondary Education

SEAD	State Secretariat of Administration (<i>Secretaria de Administração do Estado do Piauí</i>)
SEDUC	State Secretariat of Education and Culture (<i>Secretaria da Educação e Cultura do Estado do Piauí</i>)
SEFAZ	State Secretariat of Finance (<i>Secretaria de Fazenda do Estado do Piauí</i>)
SEMAR	State Secretariat of Environment and Water Resources (<i>Secretaria de Meio Ambiente e Recursos Hídricos do Estado do Piauí</i>)
SEPLAN	State Secretariat of Planning of the State of Piauí (<i>Secretaria de Planejamento do Estado do Piauí</i>)
SESAPI	State Secretariat of Health of the State of Piauí (<i>Secretaria de Saúde do Estado do Piauí</i>)
SHRP	State Health Regulation Plan
SIAFEM	Integrated Financial Management System (<i>Sistema Integrado de Administração Financeira</i>)
SIAGAS	Information System for Aquifers (<i>Sistema de Informações de águas Subterrâneas</i>)
SIMO	Integrated Monitoring System (<i>Sistema Integral de Monitoramento</i>)
SRH	Super-intendence of Water Resources (<i>Superintendência de Recursos Hídricos</i>)
STE	Secondary Technical Education
SUTEF	Super-Intendence of Technical and Financial Cooperation (<i>Superintendência de Cooperação Técnico-financeira</i>)
TCE-PI	Piauí Court of Auditors (<i>Tribunal de Contas do Estado do Piauí</i>)
TA	Technical Assistance
WHO	World Health Organization
WRM	Water Resources Management
YSP	Youth Savings Program (<i>Poupança Jovem</i>)

Regional Vice President:	Jorge Familiar
Country Director:	Martin Raiser
Senior Global Practice Director:	Claudia Maria Costin / Paula Caballero
Practice Manager:	Reema Nayyar / Raul Alfaro
Task Team Leader:	Michael Drabble / Ernesto Sanchez-Triana

BRAZIL
Piauí Pillars of Growth and Social Inclusion Project

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PAD DATA SHEET

Brazil

Piauí: Pillars of Growth and Social Inclusion Project (P129342)

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN REGION

GEDDR

Report No.: PAD459

Basic Information			
Project ID P129342	EA Category B - Partial Assessment	Team Leader(s) Michael Drabble/Ernesto Sanchez-Triana	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints []		
	Financial Intermediaries []		
	Series of Projects []		
Project Implementation Start Date 31-Jan-2016	Project Implementation End Date 30-Jun-2020		
Expected Effectiveness Date 31-Jan-2016	Expected Closing Date 31-Dec-2020		
Joint IFC No			
Practice Manager Reema Nayar	Senior Global Practice Director Claudia Maria Costin	Country Director Martin Raiser	Regional Vice President Jorge Familiar
Borrower: State of Piauí with the Guarantee of the Federative Republic of Brazil			
Responsible Agency: State Secretariat of Planning of the State of Piauí (<i>Secretaria de Planejamento do Estado do Piauí</i>)			
Contact: Telephone No.:	Sergio Miranda 558694663158	Title: Email:	Superintendent of Financial-Technical Cooperation sergiomiranda@seplan.pi.gov.br

Project Financing Data(in USD Million)					
<input checked="" type="checkbox"/>	Loan	<input type="checkbox"/>	IDA Grant	<input type="checkbox"/>	Guarantee
<input type="checkbox"/>	Credit	<input type="checkbox"/>	Grant	<input type="checkbox"/>	Other
Total Project Cost:		1133.69		Total Bank Financing:	120.00
Financing Gap:		0.00			
Financing Source			Amount		
Borrower			1013.69		
International Bank for Reconstruction and Development			120.00		
Total			1133.69		
Expected Disbursements (in USD Million)					
Fiscal Year	2016	2017	2018	2019	2020
Annual	22.80	17.00	26.00	29.50	24.70
Cumulative	22.80	39.80	65.80	95.30	120.00
Institutional Data					
Practice Area (Lead)					
Education					
Contributing Practice Areas					
Agriculture, Environment & Natural Resources, Governance, Health, Nutrition & Population					
Cross Cutting Topics					
<input type="checkbox"/>	Climate Change				
<input type="checkbox"/>	Fragile, Conflict & Violence				
<input checked="" type="checkbox"/>	Gender				
<input type="checkbox"/>	Jobs				
<input type="checkbox"/>	Public Private Partnership				
Sectors / Climate Change					
Sector (Maximum 5 and total % must equal 100)					
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %	
Education	Secondary education	50			
Health and other social services	Health	20			

Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	10		
Public Administration, Law, and Justice	General public administration sector	10		
Water, sanitation and flood protection	General water, sanitation and flood protection sector	10		
Total		100		
<input checked="" type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.				
Themes				
Theme (Maximum 5 and total % must equal 100)				
Major theme	Theme		%	
Human development	Education for all		50	
Human development	Health system performance		20	
Public sector governance	Public expenditure, financial management and procurement		10	
Rural development	Rural policies and institutions		10	
Rural development	Rural services and infrastructure		10	
Total			100	
Proposed Development Objective(s)				
The objective of the project is to: (a) reduce dropout of students in public secondary education; (b) increase access to diagnosis and treatment for patients with chronic diseases; (c) expand the registration of groundwater users in rural areas and land tenure regularization; and (d) increase the participation of rural family farmers in rural productive value chains.				
Components				
Component Name			Cost (USD Millions)	
Component 1: Provision of support for the implementation of EEPs in the following areas: (a) public secondary education, (b) health care for patients with chronic diseases, (c) water resources management, (d) land management and (e) rural productive chains			1,118.69	
Component 2: Provision of technical assistance to strengthen the Borrower's public management			15.00	
Systematic Operations Risk- Rating Tool (SORT)				
Risk Category				
1. Political and Governance			Moderate	

2. Macroeconomic	Substantial		
3. Sector Strategies and Policies	Moderate		
4. Technical Design of Project or Program	Moderate		
5. Institutional Capacity for Implementation and Sustainability	Substantial		
6. Fiduciary	Substantial		
7. Environment and Social	Moderate		
8. Stakeholders	Moderate		
OVERALL	Substantial		
Compliance			
Policy			
Does the project depart from the CAS in content or in other significant respects?	Yes []	No [X]	
Does the project require any waivers of Bank policies?	Yes []	No [X]	
Have these been approved by Bank management?	Yes []	No []	
Is approval for any policy waiver sought from the Board?	Yes []	No [X]	
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No []	
Safeguard Policies Triggered by the Project	Yes	No	
Environmental Assessment OP/BP 4.01	X		
Natural Habitats OP/BP 4.04	X		
Forests OP/BP 4.36	X		
Pest Management OP 4.09	X		
Physical Cultural Resources OP/BP 4.11	X		
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12	X		
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	
Legal Covenants			
Name	Recurrent	Due Date	Frequency
Institutional Arrangements. Schedule 2. Section I.A.1 (a)	X		CONTINUOUS
Description of Covenant			

No later than two (2) months after the Effective Date, the Borrower shall create and thereafter operate and maintain, until the completion of the Project, a coordination unit within SEPLAN, to be responsible for the overall coordination of the Project (the “PCU”), all as set forth in the Project Operational Manual.

Name	Recurrent	Due Date	Frequency
Institutional Arrangements. Schedule 2. Section I.A.1 (b)	X		CONTINUOUS

Description of Covenant

No later than one (1) month after the Effective Date, create and thereafter maintain, until the completion of the execution of the Project, at least two Special Bidding Committees, for purposes of assisting the Participating Entities in carrying out its procurement activities under the Project, with structure and functions satisfactory to the Bank, as set forth in the Project Operational Manual.

Name	Recurrent	Due Date	Frequency
Institutional Arrangements. Schedule 2. Section I.A.1 (c)		30-Jun-2017	

Description of Covenant

No later than eighteen (18) months after the Effective Date, for purposes of carrying out at least two technical audits of the compliance of the DLIs, select and contract an entity, independent from the Borrower (the Independent Verification Entity) with experience and qualifications acceptable to the Bank.

Name	Recurrent	Due Date	Frequency
Institutional Arrangements. Schedule 2. Section I.A.1 (d)	X		CONTINUOUS

Description of Covenant

No later than two (2) months after the Effective Date, create and thereafter maintain, until the completion of the execution of the Project, a Project Management Committee, with representatives of all the Participating Entities involved in the Project.

Name	Recurrent	Due Date	Frequency
Implementation Arrangements for Part 1 Schedule 2. Section I.B.7 (a)		30-Mar-2018	

Description of Covenant

Prior to the fifth Loan withdrawal under Category (1) (as referred to in the Project Operational Manual and the Additional Instructions), the Borrower shall carry out a mid-term review with the Bank to evaluate the overall progress in the execution and on the accomplishment of the Project.

Name	Recurrent	Due Date	Frequency
Cooperation Agreements Schedule 2. Section I.C.1 (a)	X		CONTINUOUS

Description of Covenant

The Borrower shall, through SEPLAN prior to initiating any activities under Parts 1.4 and 2.2(b) of the Project, enter into a Cooperation Agreement with INTERPI, for the implementation of said activities, under terms and conditions satisfactory to the Bank.

Name	Recurrent	Due Date	Frequency	
Cooperation Agreements Schedule 2. Section I.C.1 (b)	X		CONTINUOUS	
Description of Covenant				
The Borrower shall, through SEPLAN prior to initiating any activities under Part 2.1(c) of the Project, enter into a Cooperation Agreement with TCE for the implementation of said activities, under terms and conditions satisfactory to the Bank				
Name	Recurrent	Due Date	Frequency	
Safeguards Schedule 2. Section I.E.1	X		CONTINUOUS	
Description of Covenant				
The Borrower shall, with the assistance of the pertinent Participating Entity, implement the Project in accordance with the provisions of the Environmental and Social Management Framework (EMF), the Environmental Management Plan (EMP), the Health Waste Management Plan (HWMP) and Resettlement Policy Framework (RPF), all prepared by the Borrower and approved by the Bank.				
Conditions				
Source Of Fund	Name	Type		
Description of Condition				
Team Composition				
Bank Staff				
Name	Role	Title	Specialization	Unit
Michael Drabble	Team Leader (ADM Responsible)	Senior Education Specialist	Rural Development	GEDDR
Danilo Pereira de Carvalho	Procurement Specialist	Procurement Specialist	Rural Development	GGODR
Joao Vicente Novaes Campos	Financial Management Specialist	Financial Management Specialist	Rural Development	GGODR
Abdelaziz Lagnaoui	Environmental Specialist	Lead Environment Specialist	Rural Development	GENDR
Alberto Coelho Gomes Costa	Safeguards Specialist	Senior Social Development Specialist	Rural Development	GSURR
Ana Luisa Gomes Lima	Environmental Specialist	E T Consultant	Rural Development	GENDR

Andre Loureiro	Team Member	Economist	Rural Development	GEDDR	
Camille Bourguignon-Roger	Team Member	Sr Land Administration Specialist	Rural Development	GSULN	
Carolina Rendon	Team Member	Senior Public Sector Specialist	Rural Development	GGODR	
Catarina Isabel Portelo	Counsel	Senior Counsel	Rural Development	LEGLE	
Diego Juan Rodriguez	Team Member	Senior Economist	Rural Development	GWADR	
Emmanuel Eric marie Bayle	Team Member	Consultant	Rural Development	GEDDR	
Ernesto Sanchez-Triana	Safeguards Specialist	Lead Environmental Specialist	Environment	GENDR	
Gilberto Valente Canali	Team Member	Consultant	Water	GWADR	
Lorena Vinuela	Team Member	Public Sector Specialist	Public Sector	GGODR	
Luiza Guaraciaba Alexander	Team Member	Program Assistant	Assistant	LCC5C	
Luz Maria Gonzalez	Team Member	Consultant	Economist	GED04	
Monica Joyce McDonough	Team Member	Consultant	Operations Analyst	GEE04	
Raquel Almeida Campos	Team Member	Consultant	Operation Analyst	GWADR	
Renata Pereira De Mello	Team Member	E T Temporary	Assistant	LCC5C	
Extended Team					
Name	Title		Office Phone	Location	
Augusto Mendonca	Environmental Specialist				
Locations					
Country	First Administrative Division	Location	Planned	Actual	Comments
Brazil	Piauí	Teresina		X	
Consultants (Will be disclosed in the Monthly Operational Summary)					
Consultants Required?	Consultants will be required				

I. STRATEGIC CONTEXT

A. Country and State Context

1. **Over the last two decades, Brazil has made significant advances with regard to economic management, poverty reduction and social development.** Growth in employment and labor income, as well as the implementation of targeted social assistance programs, contributed to a reduction in the share of Brazilians living below the extreme poverty line from nearly 10 percent in 2001 to 4 percent in 2013¹ and inequality, as reflected in a fall in the Gini coefficient.

2. **However, Brazil is currently undergoing a deep and widespread recession.** Since the turn of the decade, the country's growth performance has continually declined from an average of 4.5 percent between 2006 and 2010 to 2.1 percent over 2011-2014. Growth in the past decade was largely based on favorable external conditions, credit-fueled consumption and an expanding labor force. As these drivers were increasingly exhausted, post-2010 structural constraints on potential growth have become binding.² Hence, while Brazil still posted reasonable growth of approximately 4 percent in 2011, growth dropped to an average of 2.3 percent in 2012-2013, and to 0.1 percent in 2014. The slowdown has been exacerbated in 2015 by the impact of the *Lava Jato* corruption investigation, a difficult political environment, and an increasingly unfavorable external environment, which have driven investment and confidence to record low levels. As a result, in the first half of the 2015 the economy contracted at an annual rate of 3.3 percent (seasonally adjusted relative to the second half of 2014).

3. **Brazil's medium-term outlook will depend on the success of the ongoing macroeconomic adjustment, as well as tackling structural fiscal pressure points and the adoption of growth-enhancing reforms.** Going forward, addressing the key sources of long term fiscal pressure, notably the social security system, will be crucial to stabilize and reduce the debt and build fiscal space. To achieve higher growth in the medium-term, raising investment and productivity is also a crucial challenge for Brazil. This requires policies to address the challenges to raising public and private investment in infrastructure, improve the quality of education, simplify red tape and the tax system, increase the effectiveness of public spending and increase competition in key sectors of the economy.

4. **In Piauí poverty deprives a significant proportion of the population from adequate living standards, income and empowerment to overcome social and productive exclusion.** With a Gini coefficient of 0.566 in 2013 (above the national coefficient of 0.52), Piauí had the highest rate of inequality among Brazilian States and across Latin American and the Caribbean region, except for Haiti (0.592). In 2013, while the *Bolsa Família* Program (BFP) directly benefited 49 percent of the State's population with income support. 27.4 percent and 9.1 percent of the State population lived in poverty and extreme poverty, respectively.³ Without the BFP benefits, at least 50.6 percent of Piauí's

¹ Data from the National Household Survey (*Pesquisa Nacional por Amostra de Domicílios*) using the extreme poverty line of the *Brasil sem Miséria* program, which was updated to R\$77 per month in June 2014.

² These include infrastructure bottlenecks, high labor costs and low skill levels, a high tax burden and onerous tax system, excessive administrative burdens, shallow credit markets, and barriers to competition and international trade.

³ The BFP is a federal program that offers direct cash transfers to families that live in poverty (per capita monthly income between R\$77.01 and R\$140.00) and extreme poverty (per capita monthly income up to R\$77.00) as long as they fulfill specific requirements in the fields of health, education, and social assistance. The Program distributes three kinds

population would live in extreme poverty. The average monthly income of men and women is R\$1,023.02 and R\$826.63, respectively. Poor groups have limited access to quality education, health care, water and sanitation. They are also deprived of natural resources, such as land, water and of means to improve their productivity and family income.

B. Sectoral and Institutional Context

Public Secondary Education (SE)

5. **Public SE in Piauí is characterized by low net enrollment and a high dropout rate.** The SE in Brazil comprises grades 10 to 12. In 2014, there were 110,000 students in general public SE⁴ and 25,790 students in secondary technical education (STE).⁵ Female students represent 55 percent of public SE enrollment. In 2013, national net enrollment in SE was 55 percent, but only 46 percent in Piauí.⁶ More than half of the youth aged 15 to 17 years were either in fundamental education (FE) or not in school. Piauí has the fourth highest dropout rate in SE among the Brazilian states (16%). Dropout is particularly problematic in the first year of SE (grade 10), among the highest rates in Brazil (20% compared to 11% nationally).

6. **The high dropout rate in the SE, particularly for the poorest segment of the state's population results from a systemic failure of state schools to effectively deliver quality SE and support students, and contributes to social exclusion.** The decision to drop out is often motivated by the need of students from poor families to earn an income.⁷ In addition, the public SE in Brazil provides only four to five hours of instruction per day. In disadvantaged urban and rural areas, a high proportion of public SE students attend evening classes, which provide a lower quality of instruction and even fewer hours of class time.⁸ The shortage of teachers in rural areas particularly in math, science and technical subjects affects the availability of classes. Students do not perceive publicly provided general SE as relevant for improving their prospects for future employment, as they finish their studies in state schools generally lacking skills demanded by the labor market. One measure of the low quality of SE is the Index of Basic Education Development, which in 2013, remained below the regional and national averages for SE (3.0 for Piauí compared to 3.4 nationally). The State Secretariat of Education and Culture (*Secretaria da Educação e Cultura do Estado do Piauí*, SEDUC) is expanding four programs aimed at reducing the dropout rate in SE⁹ and social exclusion

of benefits, based on the following factors: (i) the family's per capita monthly income; (ii) the number of children aged 15 years old or less; and (iii) the number of adolescents aged between 16 and 17 attending school.

⁴ In 2014 there were 17,487 students enrolled in private schools in SE representing 13 percent of the total enrollment in SE in Piauí.

⁵ Since 2008, the GoPi has offered STE through: (a) the integrated modality to allow students to take general and technical SE classes simultaneously; (ii) the concomitant modality to allows students enrolled in part-time general SE to study at a technical school during the other half of the day; and, (iii) the subsequent modality, offered almost exclusively through distance education to allow students to complete STE after the completion of general SE. This last modality of STE is also called e-Tec, a federal program of the Ministry of Education (*Ministerio de Educação*, MEC) that is run by the state governments and is aimed at providing technical education classes through distance learning.

⁶ Net enrolment rate in SE does not account for students enrolled in concomitant and subsequent courses.

⁷ A 2009 study of school dropout in Brazil shows that lack of income is the second main reason in Brazil (behind intrinsic interest in school - individuals do not regard attending school as an attractive option) for students to leaving general secondary school (Neri, Marcelo, 2009 *Motivos da evasão escolar*, Fundação Getúlio Vargas).

⁸ Piauí has the second highest proportion of students attending SE at night (39.8% in 2014), only behind Amazonas (39.9%).

⁹ To a comprehensive survey on the effectiveness of different programs to reduce dropout rates at the secondary level in Latin America, see Almeida, Fitzsimons and Rogers (2015), background paper to the 2015 LAC regional report.

namely, (a) full-time schools (FTS), (b) the STE, (c) the Youth Savings Program (*Poupança Jovem*, YSP), and (d) Education with Technological Intermediation (ETI) and computer-based distance learning program for SE.

Health Care Services for Poor Households

7. **Contrary to the transition from infectious diseases to chronic diseases in many developed countries, both groups of pathologies coexist in Piauí.**¹⁰ Circulatory diseases, cancer and external causes are the main reasons for death in the state. At the same time, many of Piauí's municipalities are also considered priority areas for treatment of poverty-linked and neglected tropical diseases (NTDs), such as Hansen's disease (leprosy), Leishmaniosis, trachoma, tuberculosis, soil-transmitted helminthiasis, Chagas disease and schistosomiasis.¹¹ The state has established a program to implement strategic actions to prevent, control, and respond to NTDs. In Piauí, the correlation between low socioeconomic status and higher mortality from preventable chronic illnesses¹² is attributed to variations in access to health services, exposure to risk factors and low awareness about preventative behaviors, mostly in rural areas. In addition, the health network at the state and municipal level does not meet the needs of the population, particularly for the diagnosis and treatment of chronic diseases, which increases social exclusion. Management and coordination of patient flow are weak, and too many patients are transferred to or seek care in the capital, Teresina. Many patients are not receiving adequate medical follow up and/or preventative procedures. Of the screened adult population, 20 percent reports having received a diagnosis for hypertension and 5 percent for diabetes, but only a small portion of that is registered for care at health facilities.¹³

Water Resources Management (WRM)

8. **The State Secretariat of Environment and Water Resources (*Secretaria de Meio Ambiente e Recursos Hídricos do Estado Piauí*, SEMAR) lacks the institutional capacity to enforce water resources regulations and implement interventions envisaged in the State Water Resources Plan.** Inadequate and inefficient WRM has increased productive exclusion of Piauí's poorest groups living in the semi-arid region who depend on rain-fed agriculture. The extreme water shortage in Piauí's eastern portion, specifically in the semi-arid *Sertão* and *Caatinga* biomes¹⁴

(Almeida, R., Fitzsimons, E. and Rogers, H. "How to prevent secondary-school dropout in Latin America: Evidence from rigorous evaluation", mimeo World Bank, 2015.)

¹⁰ Chronic diseases (also known as non-communicable diseases) are not passed from person to person. They are of long duration and generally progress slowly. The four main types of chronic diseases are cardiovascular diseases (such as heart attacks and strokes), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes. (World Health Organization [WHO])

¹¹ Neglected tropical diseases are a diverse group of diseases with distinct characteristics that thrive mainly among the poorest populations. The 17 prioritized by the WHO are endemic in 149 countries and affect more than 1.4 billion people, costing developing economies billions of dollars every year. In May 2013, the 66th World Health Assembly (the forum through which the WHO is governed) adopted Resolution WHA66.12, which calls for intensified, integrated measures and planned investments to improve the health and social well-being of affected populations.

¹² Guerra 2005 (*Risco de Câncer no Brasil: tendências e estudos epidemiológicos mais recentes*). Hahn 2011 (Inequalities in adoption of cancer screening from a diffusion of innovation perspective: Identification of late adopters) <http://www.sciencedirect.com/science/article/pii/S1877782110001591> - item1

¹³ VIGITEL, Brasil. "Vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico." *Secretaria de Vigilância em Saúde. Secretaria de Gestão Estratégica e Participativa. Brasília DF: Ministério da Saúde* (2013).

¹⁴ According to Projections from global climate models, the mean temperature in the Northeast region may increase by 2 to 5 degrees Celsius by the end of the 21st century. The semiarid Caatinga would become drier, with vegetation that is

contrasts with the relative well-watered lands in the rest of its territory. During severe droughts, small farmers lose crops and herds, and are hesitant to request funding from subsidized credit lines (for example, the National Program to Strengthen Family Agriculture), due to their perceived risk of not being able to produce and, consequently, repay loans should the drought continue. None of the state water basins has management plans and SEMAR relies on information provided by the applicant and/or federal agencies for analyzing water use applications. SEMAR maintains a registry of groundwater right applications and subsequent decisions since 2006, at the time when the registry was established. However, no database exists that includes unregistered entities and those registered prior to 2006. Moreover, the available data in SEMAR's registry does not allow a thorough analysis of water resources demand and supply in specific water basins. As of August 2015, SEMAR has issued permanent water use rights to less than 10 percent of the 28,391 deep wells installed in the State.¹⁵ For the surface water, SEMAR has limited information on the number of users because no research has been done so far. On top of that, the State has energy subsidies that contribute to the inefficient use of water, especially for irrigation purposes of large-scale crops.¹⁶ This situation causes serious economic, environmental and social consequences, such as limited access to water in some regions, which impair rural production by small-scale and subsistence farmers, and results in productive exclusion.

Strengthening Real Property Rights

9. **Modernizing state land administration is essential to formalize land tenure, control the acquisition of state land, and break the rural poverty cycle in Piauí.** Small-scale farmers account for 90 percent of the state's agricultural establishment, but control only a small fraction of the land, often without formal proof of ownership.¹⁷ Tenure informality also extends to medium and large-scale farmers who dominate the *Cerrado* (savanna) region and contribute significantly to the state's agricultural growth. The fact that so many farmers lack formal real property rights has significant socioeconomic implications, as it exposes them to unfair dispossession, makes access to credit and subsidized financing lines more difficult, and prevents subsistence farmers from adopting more productive agricultural practices.¹⁸ Since 2011, the Piauí State Land Institute (*Instituto de Terras do Piauí*, INTERPI) has implemented a land tenure regularization program (LTRP) whereby state land is granted to small-scale farmers. The introduction of this program was followed by the adoption of a series of measures¹⁹ that were expected to trigger a large land tenure regularization process aiding

more characteristic of arid climates by 2050, due to reductions in mean annual precipitation combined with increased mean annual evapotranspiration. In this same period, estimated groundwater recharge in Caatinga could decrease by more than 70 percent in the region (compared to rates from 1961 to 1990). The lack of rainfall would directly affect agriculture and livestock, as well as electricity generation and consumption. An extended dry season would also affect the hydrological balance regionally and negatively affect human activity.

¹⁵ Information System for Aquifers (*Sistema de Informações de Águas Subterrâneas – SIAGAS*).

¹⁶ In context of the preparation of the Piauí Productive and Social Inclusion Development Policy Loan (DPL) (P146981), in March 2015 the Bank started a dialogue with the GoPi on a prospective policy to phase out energy subsidies that contribute to the inefficient use of water resources in rural areas, especially for irrigation of large-scale crops. The GoPi could not adopt the proposed policy during the DPL preparation, due to time constraints for carrying out the analytical work, consulting the key stakeholders and reaching consensus among all governmental branches. During the IPF supervision, the Bank will continue its dialogue with the GoPi, particularly with the Secretariats for Water Resources and Rural Development, and will support relevant analytical work on this topic.

¹⁷ Small-scale farmers are defined as farmers who possess and cultivate less than 100 hectares.

¹⁸ Deininger (2003) explains, "Control of land is particularly important for women, whose asset ownership has been shown to affect spending, for instance, on girls' education..."

¹⁹ These measures include: (a) creation of an agrarian court in 2012 to address the growing number of land conflicts, fueled by the rapid expansion of agribusiness in the *Cerrado*; (ii) establishment of the Special Group for Land Tenure

thousands of land reform beneficiaries, thousands of small farmers who have been peacefully occupying state land for more than five years, and dozens of *Quilombola* communities.²⁰ However, progress has been limited by INTERPI's lack of capacity and difficulties in coordinating with the judiciary. As of early 2015, only 2,946 families and three *Quilombola* communities have had their real property rights formalized.

Support of Productive Chains for Poor Farmers

10. **Extreme poverty in Piauí is higher in rural areas, where poor farmers derive their income from subsistence and small-scale agriculture.** From 2012 to 2015, the government of Piauí (GoPi) implemented the first phase of the State Program for Employment and Income Generation in Rural Areas (*Programa Estadual de Geração de Emprego e Renda no Meio Rural*, PROGERE) to strengthen family farming and associated productive chains.²¹ The State Secretariat of Rural Development, *Secretaria de Desenvolvimento Rural do Piauí*, SDR) coordinates PROGERE, which encompasses interventions in rural activities such as: (a) funding business initiatives and strengthening family farming and production chains; and (b) supporting program beneficiaries through technical assistance, business mentoring and educational campaigns. The program's first phase operated in 112 municipalities. Except for some successful examples, such as honey-production Projects, the impacts of PROGERE's first phase were not fully documented. The GoPi has decided to launch an improved version of PROGERE II, focusing on the poorest and most vulnerable groups (women, *Quilombola* communities)²² and on productivity enhancing activities and income generating opportunities, while ensuring economic, social and environmental sustainability of subsistence and small-scale rural production. PROGERE II would develop a computerized-based monitoring and evaluation system to be used by all beneficiaries.

Public Sector Management

11. **The ability of the GoPi to target and deliver services to the most vulnerable is hampered by its poor institutional capacity to plan and monitor programs, and the limited evidence on program performance and results to support decision-making.** Although the Multi-year Plan (*Plano Plurianual [PPA]*) guides planning, investment programs are highly fragmented and driven by sectoral considerations and budgeting decisions are made in an ad hoc manner. The recent surge in capital spending, which more than doubled between 2011 and 2014, has not been accompanied with an equivalent enhancement in practices to allocate and manage such investments. As a result, the management capacity and efficiency of capital spending remain low. The introduction of the Integrated Monitoring System (*Sistema Integral de Monitoramento*, SIMO) has

Regularization (*Grupo Especial de Regularização Fundiária e de Combate à Grilagem [GERCOG]*) of the Public Prosecutor's Office; (ii) inauguration of an integrated land governance office in Bom Jesus in 2013; and (iv), creation of the land tenure regularization center by the Office of the Inspector General of the State Secretariat of Justice (*Corregedoria Geral de Justiça do Poder Judiciário do Estado do Piauí – [CGJ]*) in 2013.

²⁰ As defined by Federal Decree 4,887/2003, *Quilombola* communities are self-declared Afro-descendant ethnic-racial groups that are found within specific territories and identify with their historically oppressed ancestors.

²¹ Strengthening productive chains is an approach to adding value to products and services as they pass from one link to the next, primarily through TA focused on the production of and adding value to raw material, accessing markets, collective organization and the commercialization processes. The approach improves productive operations along the chain and generates social benefits such as poverty reduction, income and employment generation, economic growth, environmental sustainability and gender equity, among other benefits. Productive chains supported in Piauí include activities such as beekeeping, fish farming, sheep/goat farming, and cassava and cashew cultivation.

²² PROGERE II would use the *Cadastro Unico* to more effectively target coverage expansion of rural development and agriculture programs among the poor.

constituted an important initial step toward addressing the identified gaps and moving toward a cross-sectoral, results-based monitoring methodology. However, many of the problems identified during the projects' implementation are generated earlier in the investment cycle and result from the weak link between monitoring, evaluation and decision-making. Furthermore, the coverage of the monitoring system remains limited to only a share of the GoPi's program and the capacity of line secretariats to track their Projects is still low.

Mainstreaming Gender-Smart Policies

12. **Gender gaps remain considerable in Piauí, particularly in labor market opportunities, income levels and productive inclusion.** The share of female-headed households more than doubled from 2000 to 2010 (from 17% to 38%) and is significantly higher among low-income families. As women continue to earn much less than men, the more a household relies on women's income, the more likely it is to be poor. The fact that the share of women's income contributing to family income has increased throughout the state indicates the increasing vulnerability of these families, particularly in rural areas, where the proportion of women's incomes to household incomes has increased faster than in urban areas. To coordinate actions in gender and support inclusive growth for women, the GoPi created in 2013 the State Coordination of Policies for Women (*Coordenadora Estadual de Políticas Para Mulheres do Piauí*,²³ CEPM).

C. Higher Level Objectives to which the Project Contributes

13. **The Project is fully aligned with the objectives of the GoPi's development strategy reflected in the 2012–15 PPA and the 2016–19 PPA.** The Project will address several of the sectoral goals identified in the PPAs, particularly those related to: (a) guarantee access to quality education, focusing on SE and job-skills training; (b) expand equal access to quality health care; (c) increase job opportunities through productive inclusion; and (d) increase the Government's capacity to implement public policies through monitoring and evaluation.

14. **The Project is consistent with the World Bank Group's Country Partnership Strategy 2012–15 (Report No. 63731-BR) discussed by the Executive Directors on November 1, 2011.** The Project addresses the four strategic objectives of the CPS: (a) increasing the efficiency of public and private investments; (b) improving the provision of public services for low-income households; (c) promoting regional economic development; and (d) improving sustainable natural resource management and climate resilience. The Project is consistent with the recommended approach of developing new partnerships at a subnational level, focusing on the country's poverty reduction challenges. In this context, the CPS states that the Bank should give emphasis to Brazil's poorer regions, especially the northeast region, where the state of Piauí is located.

II. PROJECT DEVELOPMENT OBJECTIVES

15. The objective of the Project is to: (a) reduce dropout of students in public secondary education; (b) increase access to diagnosis and treatment for patients with chronic diseases; (c)

²³ The CEPM is responsible for: (a) developing and planning gender policies to empower women and consequently promote gender equality; (b) planning and implementing educational campaigns to combat all forms of discrimination against women; (c) articulating, promoting and implementing programs aimed at implementing policies for women through cooperation agreements between public and private organizations (at the state, federal and international levels); and (d) implementing and coordinating protection policies for women living in vulnerable situations

expand the registration of groundwater users in rural areas and land tenure regularization; and (d) increase the participation of rural family farmers in rural productive value chains.

A. Project Beneficiaries

16. The Project beneficiaries include: 120,000 students in SE (65,000 female students), teachers, and principals of public SE schools; patients (40,000 consultations per year) and health workers of the five new specialized centers for chronic diseases (SCCDs); *Quilombola* communities; family and small-scale farmers; rural workers; municipal authorities and staff of state and federal agencies; and women heads of households.

B. PDO-Level Results Indicators

17. Achievement of the PDO will be measured through five results indicators: (a) dropout rate in public SE; (b) patients under diagnosis and/or treatment for chronic diseases in the five new SCCDs; (c) groundwater users registered in the State Water Resources Users Cadastre (*Cadastro Estadual de Recursos Hidricos*, CERH) and verified by SEMAR; (d) beneficiaries who received registered land titles through the state LTRP; and (e) poor rural woman and *Quilombola* communities participating in Productive Investment Plans (PIPs).

III. PROJECT DESCRIPTION

18. The proposed Investment Project Financing (IPF) complements and leverages policy and institutional reforms supported by the proposed single-tranche US\$200 million Piauí Productive and Social Inclusion Development Policy Loan (DPL) (P146981). The IPF and DPL have been strategically prepared in conjunction to maximize impact in the state's priority sectors and activities. Annex 6 describes the alignment of the IPF and DPL results chains with the state's PPA objectives, synergies that served as a basis for the design of the two operations. The result framework of the IPF is independent of the DPL.

19. **The Project will contribute to the Bank's twin goals of eliminating extreme poverty and boosting shared prosperity by supporting the Government's efforts for enhanced productive and social inclusion.** The Project will target the state's poorest and most vulnerable citizens. Specifically, rural families will benefit from: (a) financial incentives to encourage students in state schools to complete SE, and enhanced opportunities to enroll in SE through FTS, STE and ETI; (b) enhanced health diagnosis and treatment to respond to chronic diseases, the leading cause of death in Piauí and improved knowledge and information on how to reduce NTDs; (c) formal registration of water usage that will enable farmers to secure rights and improve the productive use of water resources; (d) more secured property rights, particularly for women and *Quilombola* communities; and, (e) financial and technical support to improve small farmers' productivity including through a more adequate and efficient use of natural resources. Through a technical assistance (TA) component, the Project will: (a) strengthen systems and train staff in various state secretariats and agencies associated with the implementation of these strategic programs listed above; (b) contribute to generating evidence to guide policy-making in key sectors such as education, health and rural development; (c) strengthen the results-based monitoring framework and its decentralization in state secretariats to oversee the implementation of strategic programs associated with enhanced productive and social inclusion; (d) support the mainstreaming of a gender perspective into strategic

policies and programs (e.g. income generation programs in rural areas); and (e) facilitate the access of poor citizens to grievance redress mechanisms in sectoral agencies whose actions are key to reducing poverty in Piauí.

A. Project Components

20. The Project will have two components, the first of which will provide support for the implementation of the Eligible Expenditure Programs (EEPs), and the second of which will provide TA to strengthen the state of Piauí's public management.

Component 1: Provision of support for the implementation of EEPs in the following areas: (a) public secondary education, (b) health care for patients with chronic diseases, (c) water resources management, (d) land management, and (e) rural productive chains (estimated total cost: US\$1,118.7 million; Bank: US\$105.0 million)

Subcomponent 1.1: Improving retention in public secondary education (estimated total cost: US\$621.1 million; Bank: US\$58.3 million)

21. Carrying out activities aimed at improving retention in public secondary education through, *inter alia*: (a) expanding the Youth Saving Program for public secondary education students in targeted municipalities; (b) expanding the full-time school model in secondary education; (c) expanding secondary technical education; (d) expanding distance learning for general secondary education; and (e) reestablishing a student assessment in the Borrower's public schools.

Subcomponent 1.2: Expanding access to health care for patients with chronic diseases (estimated total cost: US\$356.6 million; Bank: US\$33.5 million)

22. Carrying out activities aimed at expanding access to diagnosis and treatment for patients with chronic diseases through, *inter alia*: (a) the setting up and operationalization of five SCCDs; and (b) the elaboration and enforcement of state protocols and medical regulation.

Subcomponent 1.3: Expanding the registration of groundwater users (estimated total cost: US\$19.0 million; Bank: US\$1.8 million)

23. Carrying out activities aimed at implementing the CERH through *inter alia*: (a) elaborating and implementing information and communication campaigns for registering groundwater users in the CERH; and (b) carrying out verification of registration of groundwater users.

Subcomponent 1.4: Strengthening real property rights (estimated total cost: US\$56.8 million; Bank: US\$5.3 million)

24. Carrying out activities aimed at supporting the implementation of the Land Tenure Regulation Program and strengthening real property rights through, *inter alia*: (a) strengthening and modernizing INTERPI; (b) carrying out the identification, demarcation and registration of state land; (c) carrying out the Land Tenure Regularization Program; and (d) supporting the operationalization of the Land Tenure Regularization Center.

Subcomponent 1.5: Strengthening participation of rural family farmers in rural productive value chains (estimated total cost: US\$65.2 million; Bank: US\$6.1 million)

25. Carrying out activities aimed at increasing the participation of rural family farmers, including, *inter alia*, women and *Quilombola* communities in productive value chains by: (a)

financing Productive Investment Plans; and (b) building capacity on technical and managerial assistance, as well as on institutional organization and logistics.

Component 2: Provision of technical assistance to strengthen the Borrower's public management (estimated total cost: US\$14.7 million; Bank: US\$14.7 million).

Subcomponent 2.1: Modernize expenditure and investment management in the public sector (estimated total Bank cost: US\$3.3 million)

26. Provision of technical assistance to modernize expenditure and investment management practices in the public sector, including, *inter alia*: (a) the strengthening of the process of planning, monitoring and evaluation of investment Projects in a single results-based system; (b) the carrying out of a study on the Borrower's public expenditure and financial accountability and the strengthening of the Borrower's capacity to implement streamlined financial management processes and an accrual accounting system in line with national accounting norms and International Public Accounting Standards; (c) the provision of training on the adoption of standards of the International Organization of Supreme Audit Institutions; (d) the modernization of the Borrower's procedures and processes to carry internal audit; (e) the designing and implementation of the Borrower's new procurement information and contract management system; and (f) Project management, including the hiring of key Project staff, the Independent Verification Entity (IVE), and Operating Costs.

Subcomponent 2.2: Build the Borrower's capacity for water resources management, land management and rural development (estimated total Bank cost: US\$7.5 million)

27. Provision of technical assistance to strengthen the Borrower's capacity to carry out the water resources cadaster, land tenure regularization and rural development including, *inter alia*: (a) the operationalization and maintenance of the CGEO; (b) the piloting of an integrated real estate registration system for notaries; and (c) the establishment of a computerized monitoring, information and management system for PROGERE II.

Subcomponent 2.3: Generate evidence to support policy-making and practice in education, health, gender and citizen engagement (estimated total Bank cost: US\$3.9 million)

28. Provision of technical assistance to generate evidence supporting policy-making in education, health, gender and citizen engagement including, *inter alia*: (a) carrying out of an impact evaluation and studies of secondary education; (b) elaborating a State Health Regulation Plan and carrying out an impact evaluation and studies on Neglected Diseases; (c) carrying out of studies on gender in the Borrower's territory; and (d) capacity building for the Borrower's Ombudsman Office.

B. Project Financing

Lending Instrument

29. The IPF of US\$120 million will co-finance multi-sector interventions based on the GoPi's strategic priorities. The Project will follow a (a) results-based approach under Component 1, and (b) TA investment approach under Component 2. 15 disbursement-linked indicators (DLIs) have been selected for activities under Component 1 (see table 3.6 annex 3). The DLIs will mark progress towards the intermediate outcomes in each subcomponent to ensure that each contributes toward the achievement of the PDO. The EEPs are a subset of the existing programs of the GoPi's PPAs, which

have been selected as priority programs to be supported by this operation.²⁴

Project Cost and Financing

Project Components	Project Cost (US\$)	IBRD Financing (US\$)	% Financing
1. Provision of support for the implementation of EEPs in the following areas: (a) public secondary education, (b) health care for patients with chronic diseases, (c) water resources management, (d) land management and (e) rural productive chains	1,118,685,570	105,000,000	9.4*
2. Provision of TA to strengthen the Borrower's public management	14,700,000	14,700,000	100.0
Total Project Costs	1,133,385,570		
Front-End Fee	300,000	300,000	100.0
Total Financing Required	1,133,685,570**	120,000,000	10.6

Note: * Financing percentage in this table is based on the ratio of the IBRD financing and Project cost for Component 1.

** Total Project costs were calculated based on the EEP's budget amounts for 2015–20 and the Bank loan amount. Budget amounts per year were based on the 2015 and 2016 Annual Budget Law (*Lei Orçamentária Annual*, LOA) and forecasts for 2017–19 by introducing an inflation rate of 10 percent per year. Exchange rate: US\$1 = R\$3.8 (dated October 30, 2015 - Project appraisal; Source: Central Bank of Brazil).

C. Lessons Learned and Reflected in the Project Design

30. **Public SE.** The design of the education activities was informed by similar programs within Brazil and in the region that aimed to improve access to education and reduce dropout rates, including the 2013 Inter-American Development Bank Program for Accelerating Progress of Education in Amazonas. Experimental work in Colombia²⁵ and Mexico's *Oportunidades* program²⁶ suggest that incentives for graduation can be effective in increasing attendance and completion. Preliminary evidence from Neri (2010) shows that STE graduates, compared to individuals with only SE, are 48 percent more likely to find work, 38 percent more likely to work in the formal sector, and earn 13 percent more.

31. **Health care services for poor households.** Specialized health care centers similar to those proposed in Piauí already exist in other states in the northeast²⁷ region.²⁸ They have contributed to increased access for patients and improved clinical management of chronic diseases leading to better health outcomes. The Project also reflects the findings of papers, highlighting access to specialized

²⁴ The EEPs include Projects and activities as outlined in annex 2.

²⁵ Barrera-Osorio, Bertrand, Linden, and Perez-Calle. 2008. "Conditional Cash Transfers in Education Design Features, Peer and Sibling Effects Evidence from a Randomized Experiment in Colombia." NBER Working Paper 13890.

²⁶ Behrman, Jere R., Jorge Gallardo-García, Susan W. Parker, Petra E. Todd, and Viviana Vélez-Grajales. 2010. *How Conditional Cash Transfers Impact Schooling and Work for Children and Youth in Urban Mexico*.

²⁷ Macêdo, Francisca Francivânia Rodrigues Ribeiro, and Márcia Maria Jorge Damasceno. 2013 *Análise de desempenho do sistema único de saúde na região nordeste do Brasil*. *Revista de Contabilidade do Mestrado em Ciências Contábeis da UERJ* 18.3 (2013): 20-36.

²⁸ <http://portal.saude.pe.gov.br/unidades-de-saude-e-servicos/secretaria-executiva-de-atencao-saude/upaes>

care as currently one of the main bottlenecks to improving health care indicators²⁹ in the country.³⁰

32. **Real property rights.** The Project reflects the literature on the role of secured real property rights, state land administration and sound land administration systems for social inclusion, economic growth, and natural resources management.³¹ It incorporates the lessons learned from World Bank's land administration Projects in Honduras, Guatemala, and Panama, as well as the Pará Integrated Rural Development Project (P082651). These Projects underline the importance of: (a) securing political commitment; (b) targeting priority areas for land tenure regularization, instead of implementing systematic land regularization; (c) promoting social communication and beneficiary participation; and (d) evaluating land regularization activities to produce evidence of their impact on poverty reduction.

33. **Productive value chains for poor farmers.** The Project includes lessons learned from the Implementation Completion Report for the Piauí Rural Poverty Reduction Project (P050881, Loan 7399-BR) and the Independent Evaluation Group's review, which highlighted the need for benefit targeting, investment in continuous training and a transparent budgeting process in municipal councils. Bank operations in Bahia, Pernambuco and Ceará provided guidance to the PROGERE II design. The Bank Report: "Rural Poverty Alleviation in Brazil – Toward an Integrated Strategy" (June 2003) identified key determinants for rural poverty in the northeast of Brazil, and proposed a strategic framework and policy options, including agricultural intensification of the small-farm sector, stimulation of rural non-farm sector growth, and incentives for youth, which were considered in the Project's design.

34. **Public sector management.** The TA component's design is informed by lessons learned from similar operations and in line with the recommendations of several Bank's analytical work on public management in Brazil, including: The Public Investment Management System of Brazil (Brumby, Melo and Velloso, 2011) and, Performance Gains in Results-Based Management in Brazil (Viñuela and Zoratto, 2013). These studies describe the experiences of other Brazilian states that have adopted results-based management and monitoring systems to improve outcomes in service delivery areas.

35. **Mainstreaming gender-smart policies.** The design of gender mainstreaming activities is aligned with findings from the World Development Report on Gender Equality and Development,³² the Gender in Agriculture Sourcebook³³, and studies carried out in 2011 by the Brazilian Institute of

²⁹ Tanaka, Oswaldo Yoshimi. 2010. *The Difficult Access to Secondary Health Care Services: São Paulo City Case Study, Brazil. Physis Revista de Saúde Coletiva* 20.3 (2010): 953–972.

³⁰ Pires, M. R. G. M., et al. 2010. *Oferta e demanda por média complexidade/SUS: relação com atenção básica. Ciênc Saúde Coletiva* 15.Suppl 1 (2010): 1009–19.

³¹ The Project reflects the findings of a series of analytical pieces on Brazil undertaken by the Bank resulting in the publication of the 2011 report *Legalizing Brazil* and the 2014 Brazil Land Governance Assessment Framework. These reports indicate that those with precarious real property rights tend not to comply with the environmental law and generally adopt unsustainable agricultural practices that lead to land degradation. The Land Governance Assessment Framework also underlined the need for addressing the functioning of notaries for improving land tenure security.

³² World Bank 2011. *World Development Report 2012 Gender Equality and Development*. Washington, DC: World Bank.

³³ World Bank 2009. *Gender and Agriculture: Sourcebook*. Washington, D.C.: World Bank, Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development.

Applied Economics (*Instituto de Pesquisa Econômica Aplicada, IPEA*).³⁴ The World Development Report establishes gender equity as a core development objective in its own right and central to enhancing productivity and economic efficiency as well as to achieving other development outcomes.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

36. The Project is a multisector operation, covering activities across ten sectors: (a) education; (b) health; (c) the WRM; (d) land tenure regularization; (e) rural productive chains; (f) public sector management; (g) public finance management; (h) procurement management; (i) gender; and (j) citizen engagement. Given its nature, 12 implementing agencies will carry out the Project, including: SEDUC, the State Secretariat of Health (*Secretaria de Estado da Saúde do Piauí, SESAPI*), SEMAR; INTERPI, the SDR, the State Secretariat of Planning (*Secretaria de Planejamento do Estado do Piauí, SEPLAN*), State Secretariat of Finance (*Secretaria de Fazenda do Estado do Piauí, SEFAZ*), the TCE, the CGE-PI, the State Secretariat of Administration (*Secretaria de Administração do Estado do Piauí, SEAD*), the CEPM and the State Ombudsman's Office (*Ouvidoria-Geral do Estado do Piauí [OGE]*). SEPLAN is the Bank's main interlocutor and coordinator for Project preparation and implementation. SEPLAN will establish and staff a Project Implementation Unit (PIU). SEPLAN will also liaise with SEFAZ for all matters related to Project FM reporting, disbursement and auditing. A Project Management Committee led by SEPLAN will be instituted to review strategic priorities and Project performance. SEPLAN has prepared a Project Operational Manual (POM) detailing implementation arrangements satisfactory to the Bank.

B. Results Monitoring and Evaluation

37. SEPLAN will track progress related to Project outcomes and impact through the SIMO. The PIU will include a monitoring and evaluation specialist. Technical focal points in each associated state secretariat and agency will monitor progress in their respective sectors. Project reports will indicate the progress made under the Project components and measure the performance against the indicators established in the results framework (RF), and will be submitted to the Bank twice a year before disbursement requests. During Project implementation, intermediate indicators will signal whether course corrections or adjustments are necessary. A Mid-Term Review (MTR) will be carried out to assess the progress of the Project and to make adjustments as needed. The GoPi will contract an IVE to carry out two technical audits during Project implementation focusing on the achievement of the DLIs.

C. Sustainability

38. The GoPi has demonstrated its commitment through its agreement to finance a substantial proportion of the EEPs. This strong ownership is evident in the prioritization of strategic Projects in the LOA and PPA documentation. Furthermore, by linking the approval of the IPF with the DPL, the GoPi has also ensured that important policy and institutional reforms promulgated recently will be supported through implementation and execution of the GoPi budget. The IPF reinforces the focus

³⁴ IPEA 2011, *Retrato das desigualdades de gênero e raça*. Brasília: IPEA.

on results promoted through the use and expansion of the new integrated planning, monitoring and evaluation system. The GoPi has reaffirmed their commitment to promoting more inclusive and equitable development. The governor has confirmed that the Project remains a priority to the Federal Government for the northeast region of Brazil.

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

39. Overall implementation risk of the Project is rated Substantial. The most relevant risks and mitigation measures are discussed in the following paragraphs.

40. Brazil is experiencing a severe and widespread recession, which is amplified by contractionary fiscal and monetary policy. Heavy dependence on transfers from the Federal Government by Piauí poses a substantial risk to the achievement of the PDO as declining Federal transfers as well as state own revenues may hamper the implementation of the GoPi's programs supported by the Project. The finances of Piauí are also vulnerable to ongoing price adjustments at the national level, specifically exchange rate and interest rate adjustments. These risks are mitigated by the level and composition of the GoPi's debt which remains low and with a small share of foreign currency denominated debt (23% of the total or 16% of Net Current Revenue, as of end 2014). Fiscal consolidation measures should however help strengthening the fiscal position of Piauí and ensure sustainability of results.

41. There is a risk that SEPLAN may not be able to coordinate the Project activities across 10 sectors and 12 implementing agencies. To mitigate this risk, SEPLAN will establish and staff a PIU with specific roles and responsibilities to accompany each sector during the Project implementation. Each sector has also prepared actions plans including calendars to facilitate the monitoring and coordination of the Project activities. The State Secretary of Planning will also stay involved and report regularly to the Governor on the Project implementation progress.

42. There is a risk that SEDUC may not be able to recruit enough teachers with the specialization necessary to work in the FTS and STE. To mitigate this risk, SEDUC will carry out a school mapping exercise to determine the location of the new FTS and STE schools, which will also take into account the availability of teachers to redeploy and hire teachers.

43. There is a risk that some patients with chronic diseases will not be admitted or adequately attended to in the new SCCDs. To mitigate this risk, access to the SCCDs will have centralized regulation units, which will use protocols to ensure diagnosis and treatment of those in need and rational use of resources.³⁵

44. There is a risk that notaries refuse to modernize their work practice and enforce the new federal and state regulations, hindering land tenure regularization. To mitigate this risk, the Project will provide TA to increase the capacity of the CGJ, which is responsible for overseeing the work of notaries. The Integrated Real Estate Registration System for notaries, also supported through TA, is

³⁵ Regulation units are areas, usually equipped with telephones and computers with internet access, where a pool of doctors works 24 hours a day receiving requests for diagnostic tests and specialist consultations, and hospitalization. Medical procedures are given or denied according to established clinical protocols.

expected to reduce possible bottlenecks and opportunities for corruption.

45. There is a risk that farmers will not adopt the new farming practices. To mitigate this risk, a POM for PROGERE II has been elaborated and approved by the Bank before program implementation. Each PIP will be carefully evaluated and the GoPi will decide how to expand the program most effectively, with the guidance of the Bank's technical team.

46. There is a risk that some implementing agencies do not have the organizational structure needed to carry out their functions. To mitigate this risk, the Project will provide TA to strengthen institutional capacity in key institutions (for example, SEMAR, INTERPI and the SDR). The Project's implementation support plan has taken these weaknesses into consideration and allocates sufficient Bank resources to provide continuous technical, fiduciary and safeguards support throughout all stages of Project implementation.

47. There are FM risks related to the Project's complex implementation arrangements, involving several budget executors and a large volume of transactions. To mitigate this risk, the Project is centralizing coordination responsibilities in SEPLAN and using the state's integrated FM system (*Sistema Integrado de Administração Financeira, SIAFEM*).

48. There is a risk that the state lacks capacity to assume additional procurement tasks beyond ongoing operations and the lack of an information system to manage procurement data. To mitigate this risk, the Project will create at least two special bidding committees inside the Procurement Department (*Diretoria de Licitações, DL*) to process the TA and all the EEPs involving International Competitive Bidding (ICB). The Project will also finance the design and implementation of a new procurement information and contract management system (under Component 2) to improve public procurement performance in the state.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

49. Results of the economic evaluation show that the Project has social and economic benefits positively affecting the development of Piau . Expected internal rate of return to be generated by the Project is 16 percent. Present value of expected net benefits is as estimated as R\$1,626 million. The risk analysis results show the likelihood of having positive returns as 87.8 percent, which is assurance that the Project activities will have positive results.³⁶ Results show that an investment cost overrun conveys medium risk to the economic results of the Project as increase can go up to 70 percent in education and 50 percent in health and the Project would still yield positive benefits. Public financing is confirmed as the best instrument for implementing and sustaining the interventions and the GoPi is committed to promoting more inclusive and equitable development through these interventions. To guarantee the most efficient use of public funds, the Project is designed with results-based disbursements, which reinforces the TA focused on the expansion of an integrated planning, monitoring and evaluation system.

³⁶ The economic evaluation was carried out for the education and health activities under Component 1, corresponding to 78 percent of the proposed investments. For education, the evaluation used a representative sample of subprojects. A cost-benefit analysis was used to evaluate the interventions, enhanced by sensitivity and risk analyses.

B. Technical

50. The technical design of the Project builds on the various diagnostics of the constraints to productive and social inclusion in Piauí, carried out during preparation. The Project preparation was informed by previous Bank-funded operations in Piauí.³⁷ The sectors selected were identified as areas with critical bottlenecks to expanding and improving the quality and sustainability of services for the poorest and most vulnerable populations in Piauí.

51. The education programs are in line with national policies as well as international best practices. The FTS allows for extended instructional time for students and a more diverse and enriched curriculum, including additional lessons, more laboratory hours to apply classroom learning, and extracurricular activities to enhance the learning experience. The STE and ETI provide access to a more diversified SE curriculum with improved prospects to enter the labor market as well as an alternative mode of general SE delivery for students in remote rural areas.³⁸ Similarly, to reduce social exclusion in accessing both diagnostic and treatment for chronic diseases for populations in rural and poorer areas, the locations of the five new SCCDs were selected based on: (a) transport infrastructure; (b) homogenous distribution of centers; and (c) high demand in relation to scarce supply of services.

52. The Project identified the allocation of water user rights in accordance with the federal and state legal frameworks on water resources to address potential controversies or disputes among different users during and following the registration and allocation of water rights. The Project identified land tenure regularization, conferring real property rights, as an instrument through which the poorest and vulnerable farmers can access benefits associated with formal land ownership, including social safety nets, access to credit, and a sustainable means for income generation. The Project identified market-driven diversification as a means to increase income for small-scale farmers.

53. The Project recognized that many of the problems encountered in the implementation of development programs result from inadequate planning and costing. The expansion in the SIMO's scope will allow for more systematic management of the Project cycle. Better planning and costing methodologies following best practices are expected to improve program performance.

C. Financial Management

54. The Bank performed an assessment of FM arrangements in accordance with OP/BP 10.00 and the FM Practice Manual.³⁹ SEFAZ will allocate dedicated FM specialists to carry out the various FM tasks detailed in the POM. The FM specialist will assure smooth flow of information among implementing agencies. SEFAZ will be responsible for supplying the budget expenditure

³⁷ Including the Piauí Rural Poverty Reduction Project (P050881), Piauí Green Growth and Inclusion DPL (P126449), Bahia Sustainable Rural Development Project (P147157), Bahia Rural Poverty Reduction Project (P057649), Ceará Rural Sustainable Development and Competitiveness Project (P121167) and the Pernambuco Rural Economic Inclusion Project (P120139).

³⁸ Similar programs in Brazil demonstrated improvements in access to education and reduction in dropout rates. Amazonas state implemented a similar program that reached more than 25 percent of the 6,100 rural communities in all 62 municipalities of the state, benefiting 30,000 students, 80 percent in SE. (Program for Accelerating Progress of Education in Amazonas, Inter-American Development Bank Project, 2013).

³⁹ Issued by the Financial Management Sector Board in March 1, 2010

data necessary for disbursements. The FM arrangements are considered adequate and ready for implementation. Fiduciary risks have been identified and appropriate mitigation measures are in place.

D. Procurement

55. The DL of the SEAD is responsible for centralizing procurement arrangements for medical equipment, telecommunication and internet services, official vehicles, pharmaceuticals, air tickets, outsourcing services, and selection of consultants. The Project will create two special bidding committees within the DL to carry out complex procurement processes for Component 2 and all EEPs involving ICB method, and for quality control. The Project will support the implementing agencies in preparing technical specifications and terms of reference. The Bank will provide training to the counterpart on Bank procurement guidelines.

E. Social (including Safeguards)

56. Social impacts associated with the Project will be mostly positive and pro-poor, particularly in the state's rural areas and among its most vulnerable groups (such as its 82 Quilombola communities).

57. The OP/BP 4.10 on Indigenous Peoples is not triggered for this Project. There are no indigenous peoples in the Project areas. Three social groups in Piauí are currently claiming recognition of their indigenous identity: the Cariri, the Itacoatiara, and the Codo-Cabeludo. However, they do not fulfill the four criteria set by the OP 4.10 identifying indigenous peoples because: (a) despite self-identification as members of a distinct cultural group, they have not been recognized by others as indigenous peoples; (b) they hold no collective attachment to geographically distinct habitats or ancestral territories in the Project area or to the natural resources in these habitats and territories; (c) they do not hold customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and (d) they do not keep an indigenous language different from the official language of the country or region. Although these three groups face high degrees of vulnerability, they do not differ from other poor rural communities in the state in accessing public programs and do not require distinct treatment for the purpose of social inclusion.

58. The OP/BP 4.12 on Involuntary Resettlement is triggered on a precautionary basis as the regularization of land tenure of Quilombola territories could lead to the involuntary resettlement of residents who do not identify as Quilombolas. The GoPi has prepared a Resettlement Policy Framework (RPF) under the scope of the Environmental and Social Management Framework (ESMF).

59. The Project will rely on existing institutional arrangements for receiving, registering and answering grievances and citizen engagement. The OGE is responsible for this function. The reliance on this state system avoids the inefficient proliferation of institutional structures and allows the Project to contribute to strengthening the capacity already in place by streamlining procedures.

60. Consultations have been held with key stakeholders and addressed the potential social and environmental impacts of the policies and programs supported by the Project. Pro-poor impacts have

been highlighted throughout the consultation process. Some stakeholder representatives from family farmers, landless workers, Quilombola associations and environmental NGOs stakeholders have expressed concerns with the institutional capacity of the state agencies to implement the activities and achieve the expected results on the Project's timeframe. These concerns were considered in designing the broad set of activities supported by the TA component, particularly in relation to the strengthening of institutions responsible for implementing the land and water management, and rural productive investment plans. The indicators and related targets have also been selected carefully to ensure that progress could be measured and incremental results achieved during the Project implementation.

F. Environment (including Safeguards)

61. The Project is rated Category "B," as the potential environmental impacts are limited in scope, localized, and temporary. The environmental assessment concluded that the Project is expected to have an overall positive impact on the environment, as the land titling program favors the preservation of protected areas. The GoPi prepared a comprehensive ESMF, in accordance with the OP/BP 4.01 Environmental Assessment requirements, including a simplified pest management plan, a RPF to provide guidance on potential environmental issues that could arise during Project implementation, and an environmental guidance for the health clinics construction works. Additionally, the GoPi prepared a Health Waste Management Plan (HWMP)⁴⁰ for the clinics' future operation, and a specific Environmental Management Plan (EMP) for Subcomponent 1.5.

62. OP/BP 4.04 on Natural Habitats was triggered, because the Project encompass a land regularization program. The OP/BP 4.04 – Natural Habitats defines the land regularization criteria and management procedures to avoid potential impacts on sensitive biodiversity areas and protected areas.

63. OP/BP 4.09 on Pest Management was triggered on a precautionary basis, because the Project will not support the purchase or increased use of pesticides and other agricultural chemicals.

64. OP/BP 4.11 on Physical Cultural Resources was triggered on a precautionary basis, because the Project will not support land tenure regularization or any other type of activity in areas with known physical cultural resources. The Project took into consideration the fact that Piauí has relevant archeological sites.

65. OP/BP 4.36 on Forests was triggered on a precautionary basis, because the Project does not support any activity that may cause negative impacts on the health and quality of forests. Overall, the Project will contribute to the conservation and restoration of the Cerrado and Caatinga biomes, inhibiting deforestation of Permanent Preservation Areas and Legal Reserves, as defined in the Forest Code. The ESMF considers the requirements of the OP/BP 4.36 whenever restoration and plantation activities are being planned.

⁴⁰ The HWMP was prepared in accordance to the Brazilian legislation, notably the Federal Law 9782/99, the National Health Agency Regulations, (RDC Anvisa 33/03) and CONAMA Resolution 283/01. The referred regulations comply with the WB Group (IFC) Environmental, Health, and Safety Guidelines for Health Care Facilities requirements.

G. World Bank Grievance Redress

66. Communities and individuals who believe that they are adversely affected by a Bank supported Project may submit complaints to existing Project-level grievance redress mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address Project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS available at <http://www.worldbank.org/grs>. Information on how to submit complaints to the Bank's Inspection Panel is available at www.inspectionpanel.org.

Annex 1: Results Framework and Monitoring

The objective of the Project is to: (a) reduce dropout of students in public secondary education; (b) increase access to diagnosis and treatment for patients with chronic diseases; (c) expand the registration of groundwater users in rural areas and land tenure regularization; and (d) increase the participation of rural family farmers in rural productive value chains.

PDO Level Results Indicators	Core	Unit of Measure	Base-line	Cumulative Target Values * indicates non-cumulative				Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition and so on)
				YR 1 (by Dec 16)	YR 2 (by Dec. 17)	YR3 (by Dec. 18)	YR 4 (by Dec. 19)				
Indicator One: Dropout rate in public SE	<input type="checkbox"/>	Percent	16	16	15.5	15	14.5	Annual	INEP/MEC	SEDUC	Ratio of the number of students who left SE during the academic year to the number of students enrolled in SE at the beginning of the year
Indicator Two: Patients under diagnosis and/or treatment for chronic diseases in the five new SCCDs	<input type="checkbox"/>	Number	0	8,000	16,000	32,000	40,000	Annual	Administrative data collected from the 5 SCCD and from the regulation department	SESAPI	Number of consultations (patients seen by a health professional) for patients referred from regulation units and according to protocols
Indicator Three: Groundwater users registered in the CERH verified by SEMAR	<input type="checkbox"/>	Number	0	200	500	1,200	2,000	Annual	Report from databases	SEMAR	SEMAR verifies self-registration done by groundwater users and issues a CERH number
Indicator Four: Beneficiaries who received registered land titles through the state LTRP	<input type="checkbox"/>	Number	0	500	2,000	3,500	5,000	Annual	INTERPI	INTERPI	Beneficiaries are small-scale farmers who received registered land titles under the provisions set forth by State Law 6,687/2015
Indicator Five: Poor rural women and <i>Quilombola</i> communities participating in PIPs	<input type="checkbox"/>	Number	0	0	200	400	600	Annual	SDR – PROGERE Information Management System	SDR	The SIG will register all beneficiaries of PIPs led by and comprised mostly of poor rural women and members of <i>Quilombola</i> communities

Intermediate Indicators	Core	Unit of Measure	Base-line	Cumulative Target Values [* indicates non-cumulative]				Frequency	Data Source /	Responsibility for Data	Description (indicator definition and so on.)
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				YR 1 (by Dec 16)	YR 2 (by Dec. 17)	YR3 (by Dec. 18)	YR 4 (by Dec. 19)		Methodol ogy	Collection	
<i>Intermediate Results Indicator 1:</i> Total number of Project beneficiaries and percent that are female	<input checked="" type="checkbox"/>	Number/	128,720	159,895	196,277	258,876	305,701	Annual	State secretariats and associated agencies implementing the Project	SEPLAN	Project beneficiaries and percent that are female in secondary schools, SCCDs, small farmers benefiting from PROGERE, people with access to water sources, people with land regularized and civil servants
		Percent	69	66	64	61	60				
Component 1: Provision of support for the implementation of EEPs in the following areas: (a) public secondary education, (b) health care for patients with chronic diseases, (c) water resources management, (d) land management and (e) rural productive chains											
Subcomponent 1.1: Improving retention in public secondary education											
<i>Intermediate Results Indicator 2:</i> Students enrolled in the YSP who pass to the next grade* [DLI 1]	<input type="checkbox"/>	Number	8,900	8,900	10,000	11,800	12,700	Annual	SEDUC	SEDUC	Number of students registered in the program successfully completing the school year (non-cumulative)
<i>Intermediate Results Indicator 3:</i> Tutoring activities for and monitoring of attendance of SE students enrolled in the YSP* [DLI 2]	<input type="checkbox"/>	Text	No	Yes	Yes	Yes	Yes	Annual	SEDUC	SEDUC	SEDUC will carry out qualitative survey on a small set of SE schools (no less than 5) to report on types of intervention carried out by the schools and regional education departments aimed at supporting retention and passing rate of students enrolled in YSP
<i>Intermediate Results Indicator 4:</i> Secondary FTS certified [DLI 3]	<input type="checkbox"/>	Number	33	39	45	51	57	Annual	SEDUC	SEDUC	SE schools meeting all the conditions to operate as a FTS according to the state council for education
<i>Intermediate Results Indicator 5:</i> Students enrolled in STE (integrated and concomitant)* [DLI 4]	<input type="checkbox"/>	Number	20,000	20,000	21,000	24,000	27,000	Annual	SEDUC	SEDUC	Students enrolled in STE schools, excluding enrollment in e-Tec (federal STE program providing technical education through distance learning) and ETI (general SE)

Intermediate Indicators	Core	Unit of Measure	Base-line	Cumulative Target Values [* indicates non-cumulative]				Frequency	Data Source / Methodology	Responsibility for Data Collection	Description (indicator definition and so on.)
				YR 1 (by Dec 16)	YR 2 (by Dec. 17)	YR3 (by Dec. 18)	YR 4 (by Dec. 19)				
<i>Intermediate Results Indicator 6:</i> STE schools that have engaged in consultations on content and modalities of training with private sector representatives.	<input type="checkbox"/>	Number	0	5	10	15	20	Annual	SEDUC	SEDUC	Consultation reports from meetings held with private sector representatives.
<i>Intermediate Results Indicator 7:</i> Students enrolled in ETI* [DLI 5]	<input type="checkbox"/>	Number	290	1,800	2,900	4,000	4,800	Annual	SEDUC	SEDUC	ETI for general SE enrollment figure provided by the Piauí Educational Management System three months after the beginning of the school year
<i>Intermediate Results Indicator 8:</i> Students enrolled in e-Tec*	<input type="checkbox"/>	Number	1,184	1,800	2,400	3,700	4,500	Annual	SEDUC	SEDUC	Students enrolled in e-Tec modality of STE.
<i>Intermediate Results Indicator 9*:</i> Learning assessment tests carried out in public SE and results disseminated at the school level [DLI 6]	<input type="checkbox"/>	Text	No	First state learning assessment test carried out in SE	Results disseminated at state and school level	Second state learning assessment test carried out in SE	Results disseminated at state and school level and to parents	Annual	SEDUC	SEDUC	SEDUC will carry the state assessment test for at least 2 subject matters and in at least one grade in SE on a census basis.
Subcomponent 1.2: Expanding access to health care for patients with chronic diseases											
<i>Intermediate Result Indicator 10:</i> SCCDs operational to receive patients for diagnosis, treatment and follow up [DLI 7]	<input type="checkbox"/>	Number	0	1	2	4	5	Annual	Progress report prepared by SEPLAN with information provided by SEASAPI	SESAPI	A SCCD is operational when the civil works, rehabilitation, equipping and staffing of the centers is complete, it can perform specialist consultation, lab and image tests for patients and can cover related operating costs

Intermediate Indicators	Core	Unit of Measure	Base-line	Cumulative Target Values [* indicates non-cumulative]				Frequency	Data Source / Methodology	Responsibility for Data Collection	Description (indicator definition and so on.)
				YR 1 (by Dec 16)	YR 2 (by Dec. 17)	YR3 (by Dec. 18)	YR 4 (by Dec. 19)				
<i>Intermediate Result Indicator 11:</i> Clinical protocols developed [DLI 8]	<input type="checkbox"/>	Number	0	4	8	10	17	Annual	Published protocols. SESAPI controls compliance with protocols used by regulation units	SESAPI	A total of 17 protocols have been proposed for implementation in regulation units and are listed in the POM
<i>Intermediate Result Indicator 12:</i> FHTs and health specialists who have been trained in the use of clinical protocols [DLI 9]	<input type="checkbox"/>	Percent	0	0	50	75	95	Annual	Training attendance lists and number of FHTs per municipality, tracked by the Primary Health Information System (SIAB)	SESAPI	Number of FHTs per municipality is included in the POM and will need to be updated annually. The first trainings will take place in year 2 of the Project and will be on the first 4 protocols developed in year 1. The trainings will be updated annually to include the new protocols developed
Subcomponent 1.3: Expanding the registration of groundwater users											
<i>Intermediate Results Indicator 13:</i> Self-registered groundwater users in the CERH electronic database [DLI 10]		Number	0	2,000	5,000	10,000	15,000	Annual	SEPLAN to certify creation and operation of the CERH	SEMAR	Water users that complete the registration form in the CERH electronic database
<i>Intermediate Results Indicator 14:</i> Registration campaigns completed		Number	0	0	0	5	10	Annual	CNARH report and documented campaigns	SEMAR	SEMAR staff will carry out campaigns in municipalities for voluntary registration of groundwater users

Intermediate Indicators	Core	Unit of Measure	Base-line	Cumulative Target Values [* indicates non-cumulative]				Frequency	Data Source / Methodology	Responsibility for Data Collection	Description (indicator definition and so on.)
				YR 1 (by Dec 16)	YR 2 (by Dec. 17)	YR3 (by Dec. 18)	YR 4 (by Dec. 19)				
<i>Intermediate Results Indicator 15:</i> Field visits carried out by SEMAR to verify the registration of groundwater users [DLI 11]	<input type="checkbox"/>	Number	0	20	40	100	150	Annual	Inspection field visits registered by SEMAR	SEMAR	The water right (outorga) is issued for a maximum water abstraction per well. The user must install a meter to allow verification by SEMAR/ Superintendencia of Water Resources (<i>Superintendência de Recursos Hídricos</i> [SRH] at any time. It is expected that SEMAR/SRH will check the abstraction rate periodically and act accordingly if it is higher than the granted maximum amount. Each visit covers the verification of several dozens of ground water users.
Subcomponent 1.4: Strengthening real property rights											
<i>Intermediate Result Indicator 16:</i> Teams in place to execute land tenure regularization activities [DLI 12]	<input type="checkbox"/>	Number	2	6	8	10	10	Annual	INTERPI	INTERPI	Number of field team operational and working on land tenure regularization and state land demarcation
<i>Intermediate Result Indicator 17:</i> Requests filed by small-scale farmers for land titles through the state LTRP [DLI 13]	<input type="checkbox"/>	Number	4,151	5,000	7,000	9,000	11,000	Annual	INTERPI database	INTERPI	Includes both pending and completed requests registered by INTERPI since the adoption of Law 6,127/2011
<i>Intermediate Results Indicator 18:</i> When applicable women are registered as beneficiaries or co-beneficiaries in land titles	<input type="checkbox"/>	Text	No	Yes	Yes	Yes	Yes	Annual	INTERPI database	INTERPI	Women beneficiaries are either sole or joint-owners, as defined in the title.

Intermediate Indicators	Core	Unit of Measure	Base-line	Cumulative Target Values [* indicates non-cumulative]				Frequency	Data Source / Methodology	Responsibility for Data Collection	Description (indicator definition and so on.)
				YR 1 (by Dec 16)	YR 2 (by Dec. 17)	YR3 (by Dec. 18)	YR 4 (by Dec. 19)				
<i>Intermediate Results Indicator 19:</i> <i>Quilombola</i> communities that receive land titles issued by INTERPI	<input type="checkbox"/>	Number	5	5	6	7	8	Annual	INTERPI records	INTERPI	Number of designated <i>Quilombola</i> sites for which geo-referencing, cartographic and titling processes have been completed
Subcomponent 1.5: Strengthening participation of rural family farmers in rural productive value chains											
<i>Intermediate Results Indicator 20:</i> PIPs proposed by producer organizations led by and mostly comprising of poor rural women or <i>Quilombola</i> communities [DLI 14]	<input type="checkbox"/>	Number	0	0	9	27	36	Annual	Registry kept by SDR	SDR	PIPs are business plans for agricultural activities implemented by farm cooperatives. Preparation, approval and financing of PIPs are described in the POM
<i>Intermediate Results Indicator 21:</i> PIPs benefiting poor rural women or <i>Quilombola</i> communities monitored using PROGERE's new Information Management System [DLI 15]	<input type="checkbox"/>	Percent	0	0	20	40	60	Annual	Reports produced through PROGERE's new Information Management System	SDR	Ratio of PIPs benefiting poor rural women or <i>Quilombola</i> communities with information registered and analyzed through the SIG and the total number of PIPs approved benefiting poor rural women or <i>Quilombola</i> communities
<i>Intermediate Results Indicator 22:</i> PIPs implemented and monitored using PROGERE's new Information Management System	<input type="checkbox"/>	Number	0	0	40	80	120	Annual	Reports produced through PROGERE's new Information Management System	SDR	PIPs are business plans for agricultural activities implemented by farm cooperatives. Preparation, approval and financing of PIPs are described in the POM

Intermediate Indicators	Core	Unit of Measure	Base-line	Cumulative Target Values [* indicates non-cumulative]				Frequency	Data Source / Methodology	Responsibility for Data Collection	Description (indicator definition and so on.)
				YR 1 (by Dec 16)	YR 2 (by Dec. 17)	YR3 (by Dec. 18)	YR 4 (by Dec. 19)				
Component 2: Provision of technical assistance to strengthen the Borrower's public management											
Subcomponent 2.1: Modernize expenditure and investment management in the public sector											
<i>Intermediate Result Indicator 23:</i> State secretariats and agencies using the SIMO	<input type="checkbox"/>	Percent	23	25	30	35	40	Annual	SEPLAN	SEPLAN	Percentage of secretariats and agencies (57 in total) using the SIMO to monitor their portfolio of investment programs
<i>Intermediate Result Indicator 24:</i> State secretariats with decentralized monitoring and evaluation teams in operation	<input type="checkbox"/>	Number	0	1	2	4	8	Annual	SEPLAN	SEPLAN	Number of secretariats with a nucleus (staff dedicated to following procedures and employing necessary tools) for monitoring Projects
<i>Intermediate Result Indicator 25:</i> Councils of Sustainable Territorial Development using the SIMO to monitor investments in their jurisdictions	<input type="checkbox"/>	Percent	0	10	20	30	40	Annual	SEPLAN	SEPLAN	Percentage of Councils of Sustainable Territorial Development (total of 11) using the SIMO to monitor investments in their jurisdiction. Councils are comprised of representatives of the Executive and Legislative branches of each municipality, and State Government and civil society representatives
<i>Intermediate Result Indicator 26:</i> Public Expenditure Observatory implemented in CGE-PI	<input type="checkbox"/>	Text	No	No	Yes	Yes	Yes	Annual	CGE-PI	CGE-PI/Corregedoria Geral da União	Certification statement of Public Expenditure Observatory installment provided by Corregedoria Geral da União

Intermediate Indicators	Core	Unit of Measure	Base-line	Cumulative Target Values [* indicates non-cumulative]				Frequency	Data Source / Methodology	Responsibility for Data Collection	Description (indicator definition and so on.)
				YR 1 (by Dec 16)	YR 2 (by Dec. 17)	YR3 (by Dec. 18)	YR 4 (by Dec. 19)				
<i>Intermediate Result Indicator 27:</i> New procurement information and contract management system developed and installed in SEAD	<input type="checkbox"/>	Text	n.a	n.a	Module on price references database operational	Module on catalogue of goods, materials and services and	Module on management of framework agreements operational	Annual	DL	SEAD	Procurement system operational with all the functionalities
Subcomponent 2.2: Build the Borrower's capacity for water resources management, land management and rural development											
<i>Intermediate Result Indicator 28:</i> Integrated Real Estate Registration System for notaries	<input type="checkbox"/>	Text	n.a	n.a	System piloted	System fully operational	System fully operational	Annual	CGJ	CGJ	The system will allow the CGJ to monitor notarial activities and will offer online services to the public, professionals, and public agencies such as INTERPI
<i>Intermediate Result Indicator 29:</i> Information Management System, including the development of software to manage real-time data on the performance and administration of PROGERE II	<input type="checkbox"/>	Text	n.a	n.a	System piloted	System fully operational	System fully operational	Annual	SDR	SDR	System (SIG) is operational. Report published to measure performance of PROGERE II
<i>Intermediate Results Indicator 30:</i> CGEO established	<input type="checkbox"/>	Text	No	No	Yes	Yes	Yes	Annual	SEMAR	SEMAR	CGEO is equipped, staffed and operational

Subcomponent 2.3: Generate evidence to support policy-making and practice in education, health, gender and citizen engagement											
<i>Intermediate Result indicator 31:</i> Classroom observation studies (Stallings method)	<input type="checkbox"/>	Text	n.a	n.a	First observation completed	Report issued and disseminated	Second observation completed Report issued and disseminated	Annual	SEDUC	SEDUC	Study details specified in the POM
<i>Intermediate Result indicator 32:</i> Impact Evaluation of the YSP	<input type="checkbox"/>	Text	n.a	n.a	Collection of data completed	Report published	Dissemination	Annual	SEDUC	SEDUC	Study details specified in the POM
<i>Intermediate Result indicator 33:</i> SHRP elaborated	<input type="checkbox"/>	Text	n.a	n.a	n.a	First draft plan	Plan completed	Annual	SESAPI	SESAPI	SHRP published in the Official Gazette and validated by the SESAPI State and Local Committee (<i>Comite Intergestor Bipartite</i>), Regional Committee (<i>Comite Intergestor Regional</i>) and the State Health Council
<i>Intermediate Result indicator 34:</i> Epidemiological survey on the dynamics of neglected diseases, especially Geohelminthiases Leishmaniosis and Chagas Disease	<input type="checkbox"/>	Text	n.a	Design of the Survey performed	Field Information collected	Results of the survey validated and published in Piauí	Action plan based on the survey results developed by SESAPI	Annual	SESAPI	SESAPI	The survey will help define the priority territories and types of intervention needed for each disease. The action plan will include the list of priority interventions with estimated costs and deadlines
<i>Intermediate Result indicator 35:</i> Impact evaluation on Tuberculosis and Hanseniasis	<input type="checkbox"/>	Text	n.a	Design of the Impact evaluation performed	Randomized interventions	Collection of data completed	Report publication and dissemination	Annual	SESAPI	SESAPI	Study details specified in the POM

<i>Intermediate Results</i> Indicator 36: PEPM elaborated	<input type="checkbox"/>	Text	No	No	Yes	Yes	Yes	Annual	CEPM/ Progress Reports	SEPLAN	Preparation and publication of the PEPM aligning state and federal policies and setting guidelines for mainstreaming gender-smart state policies
<i>Intermediate Results</i> Indicator 37: Complaints registered and processed timely by the OGE	<input type="checkbox"/>	Percentage	76	80	85	90	90	Annual	OGE-PI	OGE-PI	Complaints registered and processed within 20 days, answered or sent to the appropriate state agency for a response

Annex 2: Detailed Project Description

1. The objectives of the Project are to: (a) reduce dropout of students in public secondary education; (b) increase access to diagnosis and treatment for patients with chronic diseases; (c) expand the registration of groundwater users in rural areas and land tenure regularization; and (d) increase the participation of rural family farmers in rural productive value chains. The Project proposes to accomplish these objectives through the components and subcomponents described below. The TA under Component 2 will contribute to the achievement of the EEPs by building the capacity of staff in state secretariats and setting up systems to deliver services related to social and productive inclusion. These objectives are aligned with the GoPi's strategy as shown in Figure 1.

Figure 1. Government's Integrated Approach for Social and Productive Inclusion in Piauí



Component 1: Provision of support for the implementation of EEPs in the following areas: (a) public secondary education, (b) health care for patients with chronic diseases, (c) water resources management, (d) land management and (e) rural productive chains (estimated total cost: US\$1,118.7 million; Bank: US\$105.0 million)

Subcomponent 1.1: Improving retention in public SE (estimated total cost: US\$621.1 million; Bank: US\$58.3 million)

2. Carrying out activities aimed at improving retention in public secondary education through, *inter alia*: (a) expanding the Youth Saving Program for public secondary education students in targeted municipalities; (b) expanding the full-time school model in secondary education; (c) expanding secondary technical education; (d) expanding distance learning for general secondary education; and (e) reestablishing a student assessment in the Borrower's public schools.

3. The reduction of the dropout rate in public SE will be achieved through the combination of four complementary EEPs described below. These EEPs will affect both supply and demand constraints faced by youth in Piauí to enroll and complete SE. SEDUC will carefully monitor the implementation of these EEPs to assess progress towards reduction in the dropout rate and allow for adjustment and improvement in the design of the EEPs. The Project will also monitor closely the improvements in learning and student engagement during the IPF implementation.

4. **EEP 1: Expanding the YSP for SE students.**⁴¹ Following a pilot implementation in 2013⁴², the Project will expand the incentive program to all students in SE schools (regular, vocational/technical and SE adult learning) in the poorest⁴³ municipalities.⁴⁴ The Project will expand to SE students in additional municipalities, reaching 77 by 2018. To ensure that students in the YSP pass to the next grade, SEDUC supports schools and students with a series of pedagogical and administrative interventions. SEDUC has developed a training program for school directors, pedagogical advisors, and subject matter teachers to identify at-risk students in the YSP who might dropout and/or not pass to the next grade. Schools closely monitor students' attendance. School directors will visit parents of students with irregular and/or low attendance. Starting in 2016, schools will offer academic tutoring to students and extracurricular activities, specifically related with socio-emotional skills. Schools will work with students on an individual basis. Furthermore, students in the YSP will receive detailed information on the expected private return of completing SE and potential job prospects in their region. Workshops will be organized with private firms, local higher education institutions and community organizations to highlight the importance of completing SE.

5. Municipalities will continue to be selected from among the poorest in the state, and will help fill gaps in incentives for completion of SE that the BFP does not meet⁴⁵. To ensure timely

⁴¹ One important aspect to be considered is the possible significant differences in passing rates across some sub-groups such as gender and race. However, this is not currently possible given the fact that disaggregated data by gender for internal efficiency statistics is not readily available in Brazil. Calculating any disaggregated statistic related to internal efficiency involves merging enormous microdata sets. This will be done under the YSP impact evaluation that will monitor gender disaggregated impacts and seek to disentangle potential associated factors. That will allow SEDUC to make any necessary adjustments to the YSP program to enhance its impact on passing rates of both girls and boys. Nonetheless, the fact that the girls represent about 55 percent of enrolment in SE in Piauí is a strong indication that passing rates are lower for male students.

⁴² With support from the DPL, in 2015 the GoPi enhanced the enabling framework for service delivery in SE with the creation of a financial incentive program for students from poor municipalities to complete SE, State Law 6,706/2015 (YSP).

⁴³ The YSP was launched in early 2013 in 44 poor municipalities with 11,000 students registered in the program in 51 schools. The financial incentive is R\$400 (US\$180) for 10th grade students (first year of SE), R\$500 (US\$227) for 11th grade students, and R\$600 (US\$272) for 12th grade students. Students can withdraw up to 40 percent of the yearly reward at the end of the school year, with the remainder available for withdrawal once the student completes 12th grade. The focus of the program on the poorest areas of one of the poorest states in Brazil increases the relevance of those values to the benefited students and consequently the fraction of students that are susceptible to respond to the financial incentives. This merit-based approach and focus on the poorest areas and is aligned with the literature that examine the optimal design of this type of program (Barrera-Osorio, Felipe, and Deon Filmer. "Incentivizing schooling for learning: Evidence on the impact of alternative targeting approaches." *World Bank Policy Research Working Paper* 6541, 2013).

⁴⁴ A simple difference-in-difference analysis of the pilot program in 2013 showed an increase of 2.7 percentage points in passing rates, mostly driven by a fall in dropout rates. Additionally, experimental work in Colombia suggests that incentives for graduation are effective for increasing attendance and completion (see Barrera-Osorio, Bertrand, Linden, & Perez-Calle, 2008, "Conditional cash transfers in education design features, peer and sibling effects evidence from a randomized experiment in Colombia", NBER Working Paper 13890). Research on Mexico's Oportunidades program suggests that financial incentives increase school enrollment and attainment in SE (see Jere R. Behrman, Jorge Gallardo-García, Susan W. Parker, Petra E. Todd and Viviana Vélez-Grajales, 2010, "How Conditional Cash Transfers Impact Schooling and Work for Children and Youth in Urban Mexico").

⁴⁵ The BFP focuses on school attendance, whereas the YSP incentivizes student performance. The head of the family receives the monthly benefit from the BFP regardless of whether their children progress to the next grade and targets students aged 17 years and below. Due to high levels of age-grade distortion in Piauí the majority of students of public SE schools will not be directly covered by BFP. The YSP covers all students registered in SE, regardless

delivery of the cash incentive to students, the GoPi will implement a new management and information system (financed under Component 2) to track student progress and attendance, monitor eligibility for the program, and unlock rewards for students that pass onto the next grade and eventually graduate SE. Each year SEDUC will select a small set of schools to carry out a qualitative study of the YSP's implementation to learn on how to improve the efficiency and effectiveness of the YSP. Since students have to progress to the next grade every year (otherwise they do not receive the financial reward and become ineligible for the program in the following years), the program is expected to improve average performance of students and repetition rates, as well as dropout rates. An experimental impact evaluation supported under Component 2 will evaluate its effects.

6. **EEP 2: Expanding FTS in SE.** The Project will expand the FTS modality to increase efficiency and retention in SE.⁴⁶ There are 33 FTS and SEDUC plans to add another six FTS⁴⁷ every year until 2019. The FTS allows extended instructional time for students, allowing for a more diverse and enriched curriculum, including additional lessons, more laboratory hours to apply classroom learning, and extracurricular activities to enhance the learning experience. Teachers at the FTS are exclusively dedicated to a particular school, which fosters motivation and efficacy, as opposed to teachers that divide their time between multiple schools. To support this expansion, the Project will (a) improve school facilities in schools selected to become FTS to ensure adequate infrastructure; (b) provide initial and in-service training to teachers, principals and pedagogical coordinators;⁴⁸ (c) provide pedagogical material and equipment; and (d) finance other operating costs.

7. **EEP 3: Expanding STE.** The Project will expand the provision of the STE in all of the three modalities (integrated, subsequent and concomitant) to increase retention by providing students with an appealing alternative to general SE. SEDUC will increase the number of students enrolled in the integrated and concomitant modalities by expanding the number of the STE schools from 70 to 92 by 2018. SEDUC will support the STE schools in consulting with

of their age and pays the reward directly to the student at the end of each academic year of SE, provided that the students passes the respective grade.

⁴⁶ The literature assessing the impact of FTS programs generally show a consistent impact on dropout rates. (Holland, P. A.; Alfaro, P.; Evans, D.. “*Extending the school day in Latin America and the Caribbean.*” Policy Research working paper; no. WPS 7309; Impact Evaluation series. Washington, D.C, World Bank Group, 2015). In Brazil, Pereira (2013) and Hermeto, Resende and Mendes (2013) show substantial impacts of FTS programs on dropout rates, respectively in Pernambuco (SE) and Rio de Janeiro Municipality (Fundamental Education). Additionally, Almeida et al (2015) analyze the impacts of *Mais Educação* - a federal program to extend the school day in Fundamental Education - show no impact on dropout rates and student test scores. (Almeida et al. “Assessing the Impacts of *Mais Educação* on Educational Outcomes: Evidence from 2008 to 2011.” Mimeo World Bank & Fundacao Itau-Social, 2015.) Unlike the state and municipal FTS programs, *Mais Educação* is similar to an after-school program comprising extracurricular activities such as arts, sports, dance and so on, with some tutoring on language and math for a selected group of students. *Mais Educação* does not provide any resources to improve the infrastructure to allow an effective provision of continuous FTS. Another critical difference is that teaching in *Mais Educação* is based on unpaid volunteers, while in FTS programs like Pernambuco and Piauí, the teachers at FTS are exclusively dedicated to a particular school. (Almeida, R., Amaral, N., Loureiro, A. and Monteiro, W. “Programas de Educação Integral em Três Redes Educacionais Brasileiras”, mimeo, 2015.)

⁴⁷ Criteria for schools chosen for FTS conversion are (a) minimal quality of school infrastructure; (ii) availability of existing teachers to work full-time; (iii) minimum number of students; and (iv) quality of management.

⁴⁸ Teachers in FTS in Piauí receive an additional 40 hours of initial training as well as 8 hours of in-service training per semester. The GoPi plans to increase the number of hours of training that teachers receive.

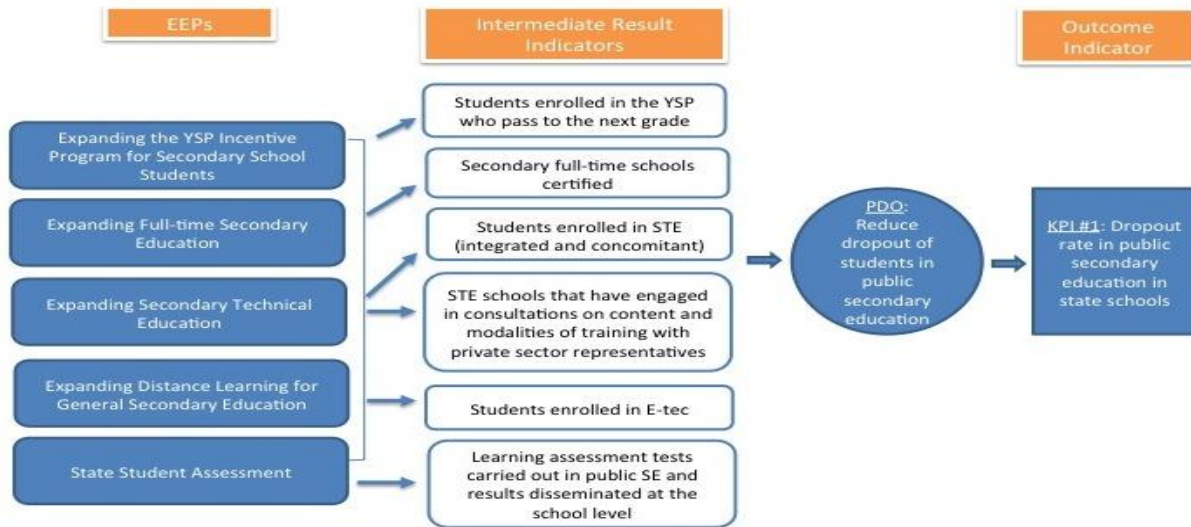
private sector firms that present the best opportunities for entry in the job market, located close to the schools. Consultations will include regular visits of firms to schools for job fairs, input from firms on the curriculum and content of professional training courses and possibly internship opportunities for students. SEDUC will also increase the number of students enrolled in the subsequent modality of the STE by leveraging the federal e-Tec program and increasing the number of e-Tec locations from 38 in 2015 to 101 in 2018.⁴⁹ The Project will finance the (a) provision of equipment; (b) provision of instructional materials; (c) improvements to electrical supply for the locations; (d) establishment of new laboratories; (d) initial and in-service training for teachers; and (d) pedagogical supervision.

8. **EEP 4: Expanding Distance Learning for General SE.** The Project will expand its distance learning ETI program, an alternative mode of SE delivery for students in remote rural areas. The ETI caters to students enrolled in general SE and preparatory classes for university entrance exam. Students are currently distributed across 300 locations in 173 municipalities. SEDUC will expand the number of classrooms in each location and will increase the number of locations in all municipalities of the state. The Project will finance (a) broadcast equipment; (b) improvements to electrical networks in teaching facilities and local substations; (c) provision of instructional materials; and (d) pre-service and on-service training for local tutors who mediate and facilitate classes on-site.

9. **EEP 5: State Student Assessment.** The Project will support the reestablishment of the standardized state student assessment in state schools in Piauí. Students will be tested at the end of each education cycle (grades 5, 9 and 12) every year. This will allow to assess student performance, providing critical inputs to the design and implementation of education policies at the state level. Those informed interventions at the school and student level will contribute to reducing the chances of students dropping out during the year.

Figure 2.1 Improved Retention in SE through Increased Opportunities to Complete SE

⁴⁹ e-Tec is a federal STE program of MEC aimed at providing technical education classes through distance learning. e-Tec offers courses listed in the national catalogue of technical courses, such as nursing, informatics and agriculture.



Subcomponent 1.2: Expanding access to health care for patients with chronic diseases (estimated total cost: US\$356.6 million; Bank: US\$33.5 million)

10. Carrying out activities aimed at expanding access to diagnosis and treatment for patients with chronic diseases through, *inter alia*: (a) the setting up and operationalization of five SCCDs; and (b) the elaboration and enforcement of state protocols and medical regulation.

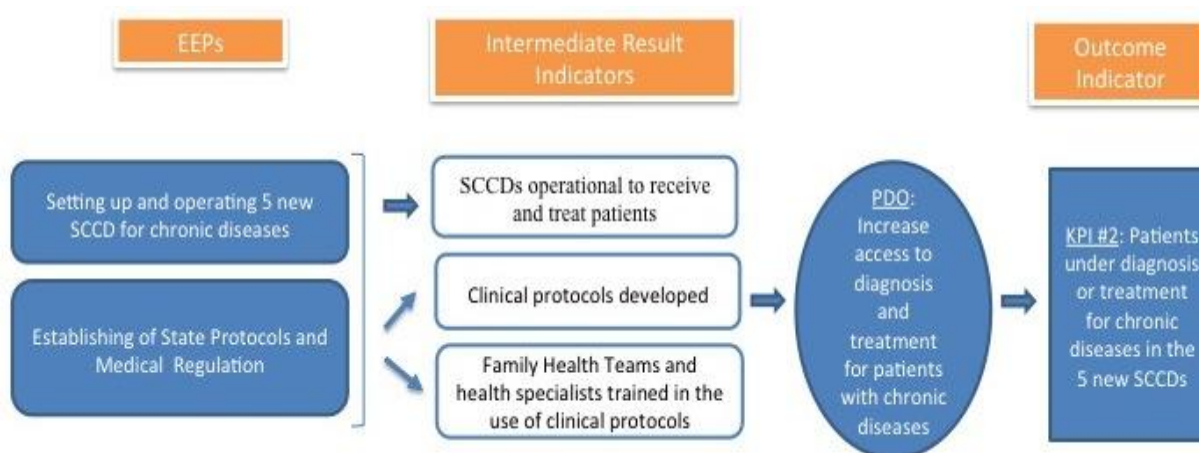
11. **EEP 6: Setting Up and Operating Five New SCCDs⁵⁰**. A main bottleneck for the reduction of mortality and morbidity due to non-communicable chronic diseases is access to diagnoses and consultations with specialists, available almost exclusively in the capital city of Teresina. The Project will support the implementation of five SCCDs (2 are already built, but not yet operational) focusing on exams and consultations for patients with chronic diseases. These centers will focus on reducing morbidity and mortality related to cancer, hypertension, and diabetes and will be located in five municipalities distributed across the state and with adequate transportation accessibility. The five centers will reach a population of 1,464,907 people and conduct an average of 40,000 consultations per year. To establish and make these centers operational, the Project will finance (a) the civil works rehabilitation and equipping of five specialized health centers; (b) specialist consultations and lab and image tests for prevention (screening) and treatment of patients; and (c) related operating costs.

12. **EEP 7: Elaborating and Applying State Protocols and Medical Regulation.** Piauí's state health system lacks established protocols for diagnosis, treatment, and management of patients with chronic diseases. Protocols are essential to ensure that access to the five SCCDs is given to the appropriate patients promptly and that patients are released from specialists' care at the appropriate time. These protocols will seek to optimize the use of SCCD resources, including doctors, lab and image tests, or treatment. Implementation of new protocols will be supported by a centralized medical regulation unit, which will control patient access to resources offered by

⁵⁰ The DPL, which will focus on neglected diseases, and the IPF, which will focus on chronic diseases, seek to improve different aspects of poverty-linked diseases for the same target populations. Many rural municipalities lack adequate health services to address infectious neglected diseases, resulting in high patient morbidity for those diseases. Similarly, chronic non-communicable diseases have high morbidity and mortality rates, especially among the poor.

the SCCD.⁵¹ The Project will finance the (a) hiring of specialists to develop a set of comprehensive clinical protocols (from primary health care to hospital level) mainly related to cancer, diabetes, and hypertension and based on international best practices; (b) establishing and equipping regulation units to manage access to the SCCDs as well as other state health facilities; (c) publication and dissemination of the protocols to municipalities, public managers, and health workers; (d) training of FHTs,⁵² specialists, managers, and patient representatives on their respective protocols; and (e) other related operating costs.

Figure 2.2 Results Chain - Expanded Access to Health Care for Patients with Chronic Diseases



Subcomponent 1.3: Expanding the registration of groundwater users (estimated total cost: US\$19.0 million; Bank: US\$1.8 million)

13. Carrying out activities aimed at implementing the CERH through *inter alia*: (a) elaborating and implementing information and communication campaigns for registering groundwater users in the CERH; and (b) carrying out verification of registration of groundwater users.

14. **EEP 8: Elaborating and Implementing Information and Communication Campaigns for Registering Groundwater Users in the CERH**⁵³. The Project will support SEMAR to establish a work program for registering the CERH water users (including private

⁵¹ The 17 clinical protocols will be on hypertension, diabetes, breast cancer, cervical cancer, urologic diseases, other cardiovascular diseases, other endocrinology diseases, chronic obstructive pulmonary disease, asthma, urologic diseases, neurologic diseases, dermatologic diseases, gastrointestinal diseases, infectious diseases, gynecological diseases, other respiratory diseases, and related surgery procedures.

⁵² FHTs are primary health care providers that would be trained on the first four protocols that are the main focus of the SCCD (diabetes, hypertension, cervical cancer, and breast cancer).

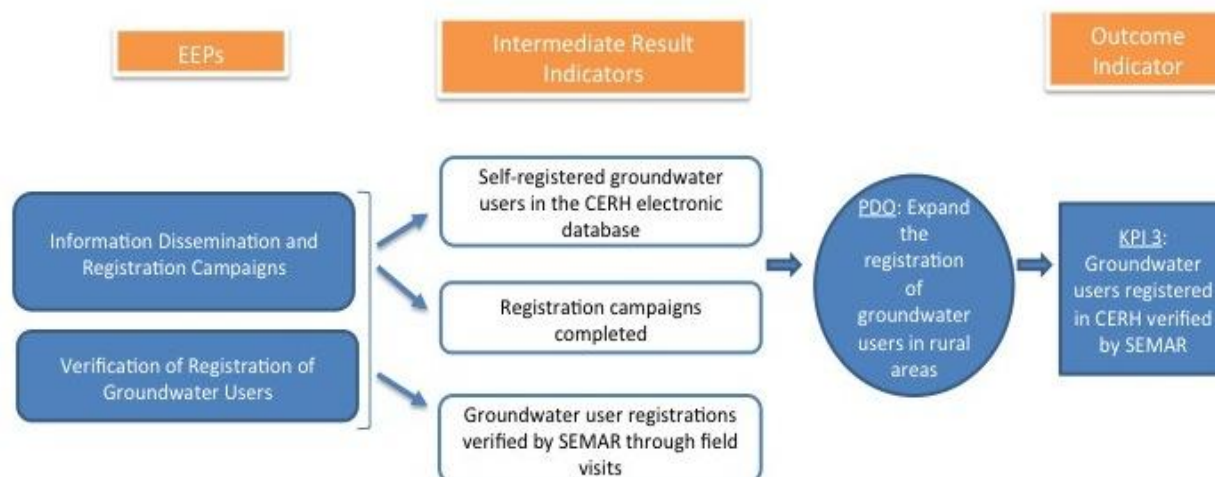
⁵³ The DPL will support the GoPi in establishing the CERH through State Law 6,474/2013, State Decree 16,142/2015 and SEMAR Ordinance 81/2015. Under this new policy, all users of surface and groundwater are required to register information with SEMAR regarding water use, including location and nature of its source, availability, volume, distribution, and water quality.

users and small and large producers) in municipalities with priority water basins. Through an agreement with the National Water Authority, SEMAR will use the National Water Resources Users Registry (*Cadastro Nacional de Usuários de Recursos Hídricos* [CNARH]) as the electronic platform for the new state registry. SEMAR will disseminate information, guidelines, and deadlines for mandatory water use registration to ensure all users register in a timely fashion. Based on its registry of water rights applications and information provided by the Brazilian Geological Service on existing wells in Piauí, SEMAR will notify water users in each municipality, including rural communities (Article 8 of State Law 6,474/2013), that they are required to register in the CERH. The users who do not register within a specified deadline will be considered irregular and, consequently, be subject to legal penalties. A consultancy will be contracted to support SEMAR staff in the preparation and implementation of work programs in the municipalities. The Project will also fund equipment such as computers, transportation and communications material to carry out the registration campaigns and provide support, particularly to poor users, to complete the CNARH forms online. The state will be divided into micro regions with regional offices established in selected municipalities, each with implementation plans and deadlines for systematic registration.

15. **EEP 9: Verification of Registration of Groundwater Users.** The Project will support SEMAR to collect and verify the information provided by users who register on time, as well as to identify users who have not done so. SEMAR will also gather information grouped by river basin to identify water rights where registered volumes of water use exceed the maximum. SEMAR will carry out those procedures in accordance to the federal and state legal frameworks on water resources, especially in the allocation of use rights. This will contribute to addressing potential controversies or disputes among different users during and following the registration and allocation of water rights. The Project will fund equipment such as flow meters, global positioning systems and other tools necessary for the verification process. The development of the CGEO⁵⁴, supported by Component 2, will also provide satellite imagery to support land claims, including information to verify water registration and, in the future, support the allocation of water rights where applicable.

Figure 2.3. Results Chain - Improved WRM

⁵⁴ While registering users in the CERH, SEMAR will also identify the users who are required to apply for water use rights, and will process such requests. This process will also be supported by the creation of an integrated system for applications and claims related to land tenure regularization, vegetation management and future allocation of water rights to streamline these processes and reduce duplicated efforts.



Subcomponent 1.4: Strengthening real property rights (estimated total cost: US\$56.8 million; Bank: US\$5.3 million)

16. Carrying out activities aimed at supporting the implementation of the Land Tenure Regulation Program and strengthening real property rights through, *inter alia*: (a) strengthening and modernizing INTERPI; (b) carrying out the identification, demarcation and registration of state land; (c) carrying out the Land Tenure Regularization Program of land reform settlements; (d) carrying out the Land Tenure Regularization Program of *Quilombola* territories; and (e) supporting the operationalization of the Land Tenure Regularization Center.

17. The GoPi has established the legal basis for land tenure regularization through State Law 6,127/2011 and State Decree 14,625/2011. The latter provides for the land tenure regularization of *Quilombola* communities while the former focuses on the regularization land tenure of small, medium and large claimants who have been producing on the land for at least five years. The GoPi has established (a) State Laws 6,464/2013 and 6,687/2015, extending the deadline for small holders to apply for formal land titles through state grants; (b) a Unified Code of Norms and Procedures for Notary Offices; and (c) a cooperation agreement between INTERPI and the CGJ to expedite land tenure regularization processes. The GoPi has adopted the legal basis to facilitate the access of small scale and subsistence farmers to public services associated with Natural Resources Management State Decree 15,502/2014, integrating the processes of INTERPI and SEMAR; and SEMAR/INTERPI Joint Ordinance 3/2015, regulating the integrated processes.

18. **EEP 10: Strengthening and modernization of INTERPI.** Despite playing a fundamental role in the socioeconomic development of the state, INTERPI lacks the financial and human resources required to execute the state land policy. INTERPI occupies the fourth floor of an aging building that is too small to accommodate its staff and equipment. While the state owns large areas, the Institute does not have a complete inventory of the state real assets. INTERPI does not have either an automated system to manage the thousands of land tenure regularization and land purchase requests⁵⁵ it receives, and lacks the resources to send its

⁵⁵ Tracking requests for land titles is an imperative step to achieving the PDO indicator of issuing land titles; thus, it is included as an intermediate indicator in the Project's RF. The tracking will be done through the Service Request Management System supported by the Project.

technical experts to the field to execute cadastral surveys.⁵⁶ This EEP will support the strengthening and modernization of INTERPI through the following activities: (a) rehabilitation of INTERPI headquarters; (b) provision of technical, legal and administrative support; (c) purchase of equipment and vehicles; (d) development of a Service Request Management System; (e) scanning and indexing of archives; and (f) training.

19. **EEP 11: State Land Identification, Demarcation and Registration.** One of the core responsibilities of INTERPI is to identify, demarcate and register state land. Ensuring that state land is demarcated and registered is a precondition for INTERPI to regularize the land tenure of its occupants. INTERPI has a large backlog of state land demarcation and registration, many of which have been slowly on-going for years due to lack of resources, conflicting claims, and difficulties in coordinating with the Judiciary. For example, INTERPI has 11 prosecutors but only five are working effectively and are eligible to retire. These difficulties in state land demarcation and registrations delay land tenure regularization. To demarcate and register land for tenure regularization, the Project will support the following activities: (a) notarial research and cadastral fieldwork; (b) issuance of notary public certificates; and (c) creation of a state land inventory. The process whereby INTERPI will identify, demarcate and register state land will be detailed in INTERPI's operational manual and will not lead to involuntary resettlement as defined in OP 4.12.

20. **EEP 12: Land Tenure Regularization of INTERPI's Land Reform Settlements.** Historically, the creation of land reform settlements has been another important responsibility of INTERPI. Since its creation in 1980, the Institute has created approximately 200 settlements inhabited by more than 10,000 families who have been settled on state land without transferring the ownership. Thousands of families have received Concessions of Real Rights of Use (CDRU) and, since the adoption of State Law 6,127/2011, INTERPI has issued 2,946 land titles. However, while these titles have not been registered, the terms of the CDRUs have often expired and land possessions have been informally transferred, usually to relatives or heirs. Under this EEP, INTERPI intends to regularize the possession of at least 5,000 families living in 99 settlements through the following activities: (a) public awareness campaigns; (b) acquisition of surveying and information technology equipment; (c) production of cadastral data; (d) title issuance and registration; and (e) formulation of development plans for target settlements. As for the state land identification, demarcation and registration (EEP 11), the land tenure regularization process will be detailed in INTERPI's operational manual and will not lead to involuntary resettlement as defined in OP 4.12.

21. **EEP 13: Regularization of *Quilombola* Territories.** Piauí has 82 *Quilombola* communities certified by the Palmares Foundation. State Law 5,595/2006 stipulates that INTERPI will execute "research and demarcation works of areas designated for *Quilombola* Communities". In practice, the National Institute for Colonization and Agrarian Reform (*Instituto Nacional de Colonização e Reforma Agrária* [INCRA]) usually coordinates tenure regularization work and solicits INTERPI if the Community is located on state land. However, the demarcation of *Quilombola* territories is progressing slowly with only five territories regularized thus far. With the Project, INTERPI intends to accelerate the tenure regularization of

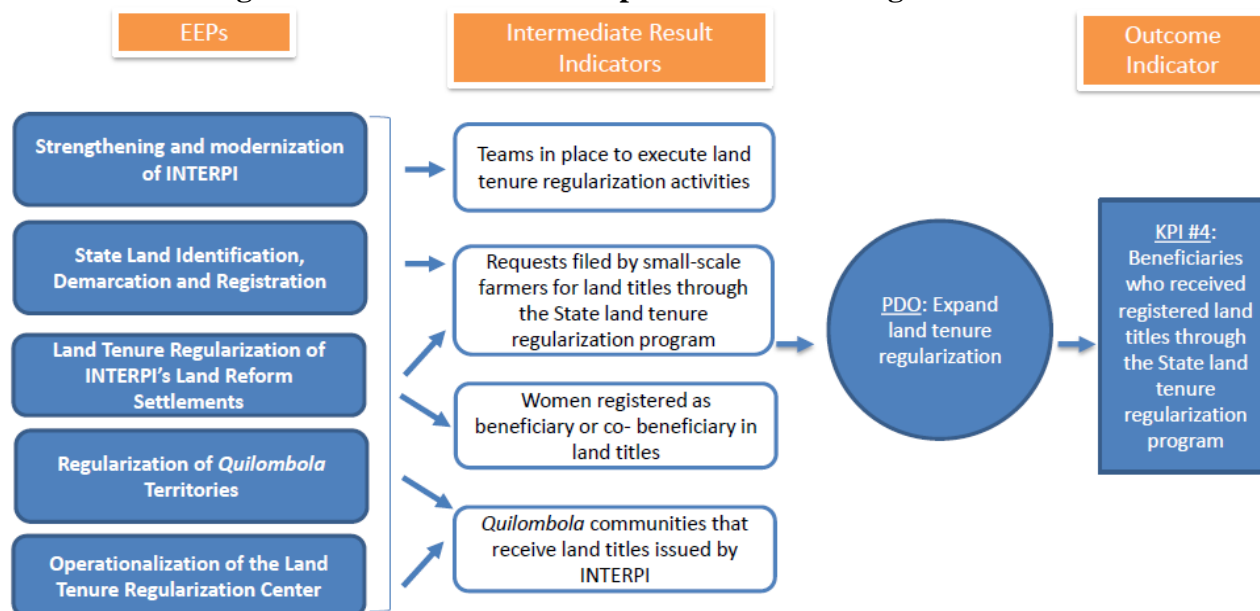
⁵⁶ INTERPI. 2014 *Diagnóstico preliminar: realidade e perspectivas*. João Batista de Freitas Júnior, Novembro 2014.

Quilombola territories through the following activities: (a) preparation of Identification and Delimitation Technical Reports;⁵⁷ (b) title issuance and registration; and (c) formulation of development plans for target *Quilombola* communities. The tenure regularization of *Quilombola* territories will be executed in partnership with INCRA under the cooperation agreement between the two entities.

22. **EEP 14: Operationalization of the Land Tenure Regularization Center.** A Land Tenure Regularization Center was established by the CGJ in May 2014 to mediate land disputes, monitor and supervise notary public activities, and prepare studies and strategies for land tenure regularization (CGJ Provision 25/2014). The center is yet to be staffed, equipped and begin operations. The Project will support the operationalization of the center through the following activities: (a) hiring of consultants; (b) hiring and training of assistants to support notaries in the registration of the real property rights of the beneficiaries of the state LTRP; (c) support to the Bom Jesus Agrarian court and to the judges responsible for controlling registry offices for the realization of inspections and the instruction of judiciary and administrative processes related to real estate registries; and (d) training to improve the activities of registry offices, the CGJ, the Bom Jesus Agrarian court, and courts with relevant competencies.

⁵⁷ The preparation of an Identification and Delimitation Technical Report (*Relatório Técnico de Identificação e Delimitação*) is the first step of the land tenure regularization process for *Quilombola* territories. The report comprises an anthropological study, a land survey, a map and description, and *Quilombola* cadastre.

Figure 2.4. Results Chain - Implemented Land Regularization



Subcomponent 1.5: Strengthening participation of rural family farmers in rural productive value chains (estimated total cost: US\$65.2 million; Bank: US\$6.1 million)

23. Carrying out activities aimed at increasing the participation of rural family farmers, including, *inter alia*, women and *Quilombola* communities in productive value chains by: (a) financing Productive Investment Plans; and (b) building capacity on technical and managerial assistance, as well as on institutional organization and logistics.

24. **EEP 15: Market-driven diversification (Agricultural and Non-agricultural Productive Chains).** PROGERE II will finance 60 PIPs⁵⁸ in pre-identified productive chains (bee-keeping, cashew production, artisan crafts, sheep and goat farming, cassava production, and the production of grains and vegetables) that will benefit productive cooperatives and organizations led by and comprising poor rural women and *Quilombola* communities.⁵⁹ The projects and business plans will be proposed for investments by the cooperatives and community organizations that represent beneficiaries (women and *Quilombola* small-scale farmers and non-agricultural producers) within these productive chains. To address challenges identified during the implementation of PROGERE I, several new steps will be included in the selection and implementation of PIPs. First, a baseline study will be carried out to ensure that progress can be measured throughout the life of the PIP. Second, a diagnostic study will be carried out to determine the potential of local productive chains and assess local institutions and potential partnerships in each region of the state to ensure the sustainability of business initiatives. Third, the selection and prioritization of PIPs will be carried out during participatory workshops to: (a)

⁵⁸ In 2014, the GoPi established State Decree 15,664 to (a) set clear criteria for selecting PIPs and their beneficiaries to prioritize the poorest rural producers and sustainable agriculture practices; and (b) set monitoring and evaluation protocol for measuring the program's performance. On July 7, 2015, the SDR Ordinance 60/2015 established PROGERE's second phase and adopted its rules for procedure.

⁵⁹ The selection of productive chains was based on the relevance for the families involved, particularly with regard to competitive advantages, potential for the creation of productive centers, and the access to inputs, credit services, and transportation to reach markets.

disseminate good business practices; (b) define the role of participating institutions; and, (c) develop business plans. Fourth, selected beneficiaries will be required to contribute at least 30 percent of the total cost of the investment, in cash or in kind, through materials or labor, to promote ownership of the PIPs and ensure their sustainability and long-term potential for income generation. Last, each territory will have learning programs for beneficiaries that will include all potential stakeholders along the value chain. The TA under subcomponent 2.2 will finance the establishment of a monitoring and evaluation system to evaluate PROGERE II's impact on beneficiaries' income generation. This will be used to better inform evidence-based program expansion and design adjustment.⁶⁰ The Project will not finance PIPs that will not have collected baseline and intermediate, and final information to estimate the impact of the activities undertaken.

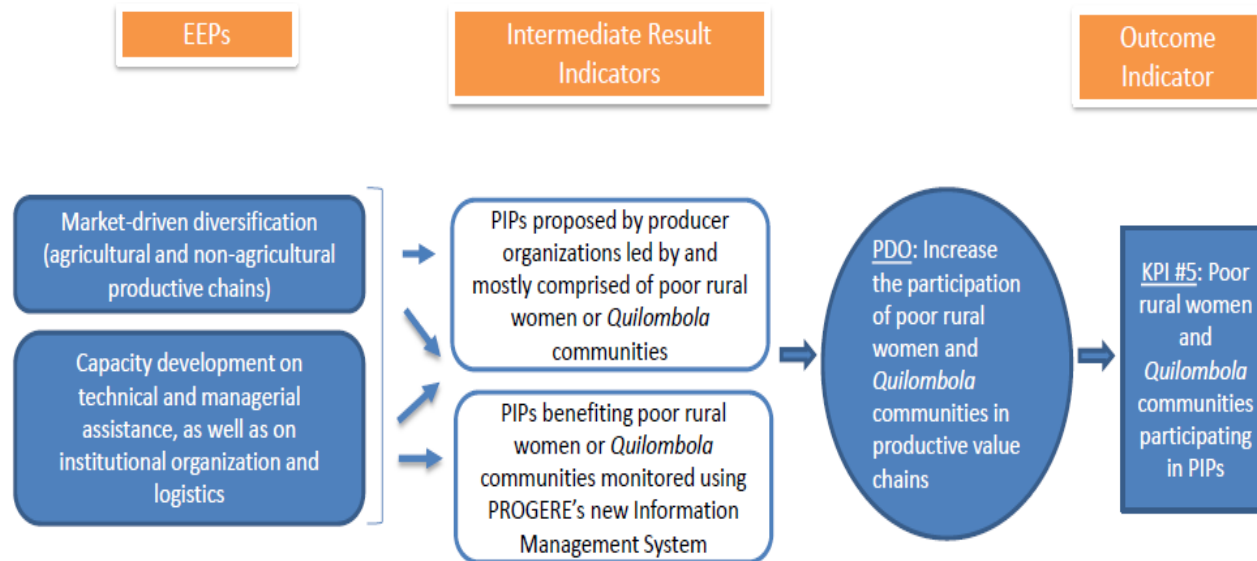
25. The GoPi will also pursue two different strategies to provide incentives to adopt environmentally sustainable productive practices.⁶¹ First, the GoPi will develop criteria for the promotion of economically and environmentally sustainable practices in the PIP. These criteria will be defined in PROGERE's Operational Manual and will follow the locally available recommendations promoting techniques aimed at enhancing agricultural productivity while promoting environmental sustainability. Second, the GoPi will finance programs for small producers related to environmental education and dissemination of information and training on good agricultural practices. This strategy will also include the implementation of local demonstration units, training events and studies on the viability of different production models using sustainable techniques, and evaluations of the environmental impact of the technologies adopted.

26. **EEP 16: Capacity Development.** The GoPi will support capacity building for subsistence farmers, rural producers and local development agents for the preparation and implementation of the PIPs. Capacity building will focus on technical and managerial assistance, as well as on institutional organization and logistics. In addition, the Project will invest in people's skills and productivity to provide opportunities for those who will seek to move to the non-agriculture sector. It will be carried out through, among others things, (a) training courses on knowledge management, dissemination of good practices, and business plan development; (b) training courses to strengthen agro technical schools; (c) events to exchange experiences among beneficiaries; (d) support programs for producer cooperatives, community associations, and municipal councils for rural development for studies on economic viability, promotion of products and market requirements, response to changing markets, and information systems. To ensure long term sustainability, capacity building will be done in partnership with local non-governmental organization and state and federal institutions such as the Institute of Technical Assistance and Rural Expansion (*Instituto de Assistência Técnica e de Expansão Rural*) and Brazilian Support Service for Small and Micro-Enterprises (*Serviço Brasileiro de Apoio às Micro e Pequenas Empresas*).

⁶⁰ World Bank 2015. Sustaining Employment and Wage Gains in Brazil. A skills and Jobs Agenda. Direction in Development. Human development. Washington, DC: World Bank

⁶¹ Environmentally sustainable productive practices will be monitored through the PROGERE Information Management System developed with the support of the Project's TA, to be operational before PIPs are financed.

Figure 2.5. Results Chain - Strengthening Participation of Rural Family Farmers in Rural Productive Value Chains



Component 2: Provision of technical assistance to strengthen the Borrower’s public management (estimated total cost: US\$14.7 million; Bank: US\$14.7 million)

Subcomponent 2.1: Modernize expenditure and investment management in the public sector (estimated total Bank cost: US\$3.3 million)

27. Provision of technical assistance to modernize expenditure and investment management practices in the public sector, including, *inter alia*: (a) the strengthening of the process of planning, monitoring and evaluation of investment Projects in a single results-based system; (b) the carrying out of a study on the Borrower’s public expenditure and financial accountability and the strengthening of the Borrower’s capacity to implement streamlined financial management processes and an accrual accounting system in line with national accounting norms and International Public Accounting Standards; (c) the provision of training on the adoption of standards of the International Organization of Supreme Audit Institutions; (d) the modernization of the Borrower’s procedures and processes to carry internal audit; (e) the designing and implementation of the Borrower’s new procurement information and contract management system; and (f) project management, including the hiring of key Project staff, the IVE, and operating costs.

Integrated Planning, Monitoring, and Evaluation System

28. The GoPi has developed an institutional framework and processes to implement management for results. To support results-based management, the SIMO was developed to track the progress of priority programs of the 2012–15 PPA. In 2013, following a successful pilot, the GoPi began to monitor priority PPA actions through the SIMO. Presently, the GoPi is undertaking a revision of the processes and methodologies supporting the SIMO and developing new features (including the integration with the state’s financial system and creating a control panel, among others) to deepen the scope of monitoring. The GoPi has established the legal basis for the government-wide implementation of an integrated planning, monitoring, and evaluation system, including the SIMO; the rules and procedures for executing, monitoring and evaluating

investment Projects and programs; and the decentralization of monitoring responsibilities to line secretariats. These measures contribute to formalizing and institutionalizing results-based monitoring to ensure continuity and sustainability and improve planning and costing. In addition, the GoPi will implement a legal framework to guide the implementation of systematic monitoring of contracts with the Federal Government to implement specific investment activities and programs funded with earmarked discretionary transfers.

29. The Project will support the implementation of policy changes to strengthen the process of planning, monitoring, and evaluation of investment projects. These include: (a) development of the state's planning, costing and ex-ante evaluation methodologies and instruments; (b) review of the state's monitoring and ex-post evaluation methodologies and processes; (c) improve and develop new sectoral indicators; (d) train staff on planning, monitoring and evaluation, as well as in Project management and the construction of indicators; (e) develop guidelines and manuals for the functioning of decentralized monitoring units in line secretariats; (f) conduct evaluations of investment programs; and (g) strengthening of territorial development councils' monitoring capacity.

30. These activities will improve outcomes and efficiency in the use of state resources by enhancing the quality at entry of Projects, providing better and more relevant monitoring tools, and carrying out evaluations to inform planning and decision-making. The development of new indicators and addition of qualitative information within the framework of the SIMO will facilitate Project monitoring and allow the Government to better assess performance and results. In parallel, the coverage of the system will be expanded to include all direct administration agencies,⁶² which is expected to improve cross-sectoral coordination and information sharing, remove bottlenecks in delivering programs, achieve better outcomes from investment, and inform future planning.

Public FM

31. Since 2011, the state has been modernizing public FM and improving fiscal space to increase strategic investments. The GoPi is currently implementing new FM processes and an accrual accounting system in line with new Brazilian accounting norms and International Public Sector Accounting Standards. The GoPi is in the process of rolling out a new integrated FM system to update the SIAFEM to implement the new norms.

32. Given the complexity of implementing the new system, the Project will finance:

- (a) A public expenditure and financial accountability (PEFA) diagnostic study and an action plan to address the identified gaps carried out under the responsibility of SEFAZ.⁶³ The assessment will provide the baseline for measuring the performance of public FM systems in Piauí and help the state to monitor the progress in implementing public FM

⁶² The state administration is divided between direct and indirect administration. Line and central secretariats (planning, administration, finance, and so on) make up the direct administration. The indirect administration is composed of another 30 or more agencies, including public companies, autonomous entities, institutes, and so on.

⁶³ The PEFA provides a shared understanding of the performance of the public FM system and the areas to be improved. www.pefa.org

reforms.

- (b) Following the completion of the International Public Sector Accounting Standards diagnostic aimed at enhancing the quality of financial information and reporting in the state, under the responsibility of SEFAZ the Project will provide support to (a) strengthen the capacity of the state to implement the reforms and (b) conduct training and sensitization workshops to further disseminate the new rules and requirements to both public sector officials and staff working directly in the area of public accounting.
- (c) Training and consulting services to support the Piauí Court of Auditors (*Tribunal de Contas do Estado do Piauí* [TCE-PI]) in adopting the standards of the International Organization of Supreme Audit Institutions (INTOSAI).⁶⁴ The adoption of the new integrated FM system will allow the GoPi to manage financial resources and physical assets, with positive impacts for all sectors and overall fiscal stability. Importantly, adopting international standards will improve internal controls and transparency with respect to all assets and liabilities and provide the Government with more comprehensive and consistent information about costs and income. It will also improve the consistency and comparability of financial statements over time. The adoption of INTOSAI rules will strengthen the accountability and transparency, allowing GoPi to take full advantage of the information that the new SIAFEM will produce.
- (d) Following the Internal Audit Capability Model (IA-CM) carried out for Piauí's public sector⁶⁵ in 2015, the Project will support the modernization of the procedures and processes used by the Comptroller General of the State of Piauí (*Controladoria Geral do Estado do Piauí* [CGE-PI]). The Project will finance the installation in the CGE-PI of new computer-based systems to strengthen the CGE-PI's capacity to carry out, and comply with performance audits and report them accordingly. The Project will also finance the purchase of equipment and training of staff in the use of new systems installed at the CGE-PI.

Procurement

33. The GoPi is working to improve the quality of procurement of goods and services and increase the use of electronic tendering. Piauí has established a centralized procurement mechanism to increase economies of scale in acquisition and standardize controls and practices. A major hindrance to making this new process fully effective, however, is the low capacity of line secretariats that provide the technical specifications for goods and services.

34. To improve the procurement capacity of the SEAD and specifically the DL, the Project will finance the design and implementation of a new procurement information and contract management system. The new system will comprise modules to improve the management of procurement processes and increase transparency regarding procurement function and contract management. The system will comprise the following modules: (a) price references database; (b) an electronic catalogue of goods, materials and services usually procured by the GoPi; (c) management of framework agreements (commonly known as *Atas de Registro de Preços*); (d)

⁶⁴ The INTOSAI standards can be accessed at: <http://www.intosai.org>

⁶⁵ The Internal Audit Capability Model (IA-CM) for the Public Sector (The IIA Research Foundation, 2009).

management of bidding processes and (e) contract administration module.

35. In addition, the Project will finance consulting services on procurement to assess the flow of procurement processes inside the GoPi structure, identify bottlenecks and propose actions to strengthen the local public procurement system. The expected benefits are to increase the quality of procurement planning within line secretariats and provide tools to reduce duplication of efforts in buying, receiving, inspecting and processing payments.

Project Management

36. The Project will finance expenditures related with Project management, including the hiring of key Project staff, the Independent Verification Entity (IVE) for the carrying out of technical audits, and operating costs.

Subcomponent 2.2: Build state capacity for WRM, land management, and rural development (estimated total Bank cost: US\$7.5 million)

37. Provision of technical assistance to strengthen the Borrower's capacity to carry out the water resources cadaster, land tenure regularization and rural development including, *inter alia*: (a) the operationalization and maintenance of the CGEO; (b) the piloting of an integrated real estate registration system for notaries; and (c) the establishment of a computerized monitoring, information and management system for PROGERE II.

WRM

38. The WRM team of SEMAR will receive TA to carry out the state WRM program through the (a) development of a support strategy for decision making and training; (b) expansion of capacity of the WRM team with consultant support and equipment; and (c) implementation of studies to inform the revitalization of the Guaribas River, operation of the Bocaina Dam, diagnosis of aquifer depletion, feasibility of the State WRM Plan and the creation of a Master Plan for Lakes.

Establishment of the CGEO

39. The GoPi will equip, staff, operationalize and maintain the CGEO by financing training activities and the purchase of equipment, software and satellite images. The Center will offer state agencies, especially INTERPI and SEMAR, the high-quality cartographic information needed to design and implement the programs described under Component 1. While the center will provide inputs for several state agencies and secretariats, it will be housed and managed primarily under SEMAR.

40. The establishment and functioning of the CGEO will support the integration of processes and protocols for applications received by INTERPI and SEMAR for land tenure regularization and allocation of natural resources. The INTERPI's land tenure regularization process requires SEMAR's verification that the area in question is not environmentally protected by law or of ecological interest⁶⁶ as well as proof of the landholder's Rural Environmental Registry

⁶⁶ State Law 6,127/2011 requires that any public land to be sold to private actors must first undergo a screening process to ensure that the area is not of high conservation value (for example, fully protected conservation areas, as defined by Federal Law 9,985/2000 on the National Protected Areas System) and is not being claimed by indigenous people or *Quilombolas*.

application, also done through SEMAR.⁶⁷ The agencies, however, lack adequate coordination mechanisms to efficiently carry out these tasks, resulting in institutional overload, duplicated efforts, and a delay of around 12 months to process environmental licenses. This provides a disincentive for farmers to regularize their holdings and disqualifies them from applying for credit and from participating in state programs such as PROGERE. The integrated processes will facilitate applicants' compliance with environmental regulations required for formalizing real property rights, acquiring water use rights and participating in national and state development programs. Additionally, they will contribute to monitoring and controlling productive landscapes, vegetation cover in private landholdings, and water rights management. The institutional and technological integration of the two entities will standardize and automate geo-referencing procedures, improving land planning and promote the orderly occupation of vacant state land.

Modernization of State Land Administration

41. Considering that the lack of human and financial resources has been one of the main challenges for the implementation of the state LTRP and, more generally, to modernize state land management, the objective of this TA is to ensure that INTERPI, the CGJ, and GERCOG of the public prosecutor's office have the minimum capacity required to perform the activities of Subcomponent 1.4. The TA will be provided through the following activities: (a) hiring of a technical advisor, creation of a field team,⁶⁸ and acquisition of equipment for INTERPI; (b) hiring of a technical advisor for the land tenure regularization center of the CGJ; (c) acquisition of equipment, vehicles, software, and consulting services for the GERCOG; (d) consulting services, studies, study tours and conferences.

Integrated Real Estate Registration System for Notaries

42. The Project will pilot an Integrated Real Estate Registration System for notaries. Only a small portion of the notaries have a computerized registration system and those who have such a system administer it independently, without any CGJ supervision. The proposed system will be an intuitive platform that will allow the CGJ to monitor notarial activities and will offer online services to the public, professionals, and public agencies such as INTERPI. The CGJ also intends to explore possibilities of requiring notaries to integrate real estate registries with key cadastral information systems, such as the INCRA's Land Management System and municipal cadastre. This TA will include the following activities: (a) preparation of the system legal parameters and technical requirements; (b) study of integrated real estate registration system available in the market; (c) acquisition or development of the system; (d) piloting of the system; and (e) training of the CGJ, relevant courts and public registry offices.

Monitoring and Information System for PROGERE II

43. To support improved monitoring and management of PROGERE II, the Project will finance (a) the design and implementation of a computerized monitoring and management system, leveraging an existing system used by SDR, to manage real-time data on the performance and administration of PROGERE II; (b) a consultancy to establish a baseline for

⁶⁷ The Rural Environmental Registry is a tool to monitor and control compliance with Federal Law 12,651/2012, which requires landholders to permanently preserve natural vegetation on steep slopes, along watercourses (up to a given distance from the margin) or near springs.

⁶⁸ The field team will be composed of two cadastral surveyors, a topographer, surveyor, lawyer and a driver.

each of the activities of PROGERE before the start of the second phase of the program; and (c) other analyses and training needed to define the key sustainable practices to be used in each productive chain and to provide a full picture of PROGERE II's expected results.

Implementation Support for PROGERE II

44. The GoPi will increase the technical, operational and logistical capacity of staff in the Project Coordination Unit for PROGERE II within the Directorate for Combating Rural Poverty (*Diretoria de Combate à Pobreza Rural*) of the SDR to improve the overall efficiency of the unit for the supervision of PIPs. Activities will include per diem supervision costs, acquisition of vehicles, acquisition of equipment (Global positioning systems and tablets), and other related operating costs.

Subcomponent 2.3: Generate evidence to support policy-making and practice in education, health, gender and citizen engagement (estimated Bank cost: US\$3.9 million)

45. Provision of technical assistance to generate evidence supporting policy-making in education, health, gender and citizen engagement including, *inter alia*: (a) carrying out of an impact evaluation and studies of secondary education; (b) elaborating a State Health Regulation Plan and carrying out an impact evaluation and studies on Neglected Diseases; (c) carrying out of studies on gender in the Borrower's territory; and (d) capacity building for the Borrower's Ombudsman Office.

Studies and Support for Policy Evidence in SE

46. The Project will finance the following three consultancies to assess the impact of programs financed under Component 1 and to improve the state policy for education management.

- a) A rigorous impact evaluation of the YSP will seek to establish the causal impacts on student performance and retention. A randomized control trial for 2016 with a reduced number of students (a power calculation analysis will determine the sample size) will be used. The use of questionnaire to capture socioemotional aspects⁶⁹ will allow determining the student characteristics associated to the effectiveness of the program. The study will be complemented by quasi-experimental analysis (regression discontinuity design) that will exploit the linear criterion to assign municipalities into treatment. The Borrower will ensure assure that the impact evaluation results are delivered by early 2017 to allow the provision of recommendations for possible adjustments to the program for improving its effectiveness.
- b) A diagnostic of SE provided in the evening and a diagnostic of the teacher professional development in the state. These studies will provide invaluable inputs to guide the GoPi's policy to reduce the number of students attending classes in the evening and improve teacher training in Piauí.

⁶⁹ The socioemotional questionnaire was developed and tested by the Instituto Ayrton Senna that will authorize its use for this research.

- c) An SE classroom observational study using the Stallings method to measure teachers' use of time in the classroom. This study will allow for a detailed diagnostic of the pedagogical practices in Piauí's education system.

47. The Project will finance: (a) the development of a monitoring system to allow SEDUC to more efficiently supervise and manage schools, with a focus on assessing the performance of teachers and pedagogical coordinators; (b) a specialized consultancy to analyze the secretariat's organizational management structure and processes, which will inform a possible future restructuring of SEDUC;⁷⁰ (c) a school mapping to determine the locations where the ETI program will have the greatest impact, based on the number of students in the relevant age group of SE in communities not served by a SE school⁷¹ and a technical audit to assess the conditions of all existing ETI locations, particularly the electricity supply;⁷² (d) a mapping of technical education locations in the state to guide the geographic placement of new state secondary technical schools and e-Tec locations as well as a mapping of demand for technical skills in the labor market that will include the possibility of partnerships with local firms, needs of local production chains, and consultations with local stakeholders on curriculum development for technical courses.

Studies and Support for Policy Evidence in Health

48. The Project will finance the following three consultancies to assess the impact of programs financed under Component 1 and to improve the state policy for neglected tropical diseases⁷³ supported by the DPL.

- a) The Project will finance the elaboration of a SHRP. The purpose of the plan is to define the norms and organization under which patients in the state will access health services. Health regulation plans have led to a more optimized use of the resources in public health system in other Brazilian⁷⁴ states.⁷⁵ The plan will include elements such as: (a) the

⁷⁰ A United Nations Development Program 2011 diagnostic identified the need to establish a monitoring system for Piauí's state education system and recommended an organizational restructuring and redefinition of SEDUC's processes.

⁷¹ This mapping exercise will also inform SEDUC on the demand for new, particularly rural SE schools throughout the state.

⁷² A preliminary analysis of the 2012 National Household Survey (*Pesquisa Nacional por Amostra de Domicílios*) Federal Bureau of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatísticas*) data shows that from the nearly 590,000 people between 15 and 24 years of age in Piauí, about 149,000 had completed FE or started SE in the past, but were not attending school in that year. Forty percent of those lived in rural areas. Data from the 2020 census will be used to map potential ETI general SE students at the district level.

⁷³ Many of Piauí's municipalities are considered priority areas of neglected and poverty-related diseases such as geohelminthiasis, Chagas disease, Hansen's disease, Leishmaniosis and tuberculosis. Neglected tropical diseases are a diverse group of diseases with distinct characteristics that thrive mainly among the poorest populations and undermine the intellectual development of populations in regions with poor health care. For these reasons, these diseases are stigmatizing. A large proportion of those illnesses are entirely avoidable or treatable with existing medicines or interventions. Most of these diseases find its roots in the consequences of poverty and poor environmental quality, such as malnutrition, inadequate housing and hygiene conditions, indoor air pollution, lack of or limited access to proper sanitation and quality water, and education

⁷⁴ Lemões, Marcos Aurélio Matos, et al. 2013. "Characterization of Care Coordination Actions Articulated to Primary Health Care in Cities in South and Northeast Brazil: 2001–2004" *Epidemiologia e Serviços de Saúde* 22.4: 631–640.

definition of the health priorities for which access should be regulated; (b) the responsibilities of municipalities, state and federal administration in the regulation process; (c) the budget allocated for each action proposed in the plan; and (d) the implementation schedule of the plan. The plan will be limited to the access to the SCCDs. The medical regulation department in SESAPI is responsible for coordinating the execution of the SHRP and will define how patients will have access to the resources offered by the SCCDs. The TA will finance consultants to elaborate the plan, equipment for the regulation department and trainings of the health staff for the implementation of the SHRP.

- b) The Project will finance an epidemiological survey on the dynamics of neglected diseases, especially Geohelminthiasis and Leishmaniasis. The survey will help define the priority territories and types of intervention needed for each disease. The Project will also finance the development of an action plan, based on the results of the survey prioritizing operations for the newly established center of response to neglected diseases.
- c) The Project will finance an impact evaluation focused on healing rate to better understand the outcomes of the *Plano Integrar*.⁷⁶ The impact evaluation would focus on Tuberculosis and Hanseniasis for which patients are easier to follow up, because the drug distribution is centralized in the public health units.

Gender-smart Public Policies

49. The state has adopted the legal basis to operationalize the CEPM to mainstream a gender perspective into the design, implementation, and supervision of state public policies through State Decree 16,162/2015. To support the CEPM's operations, the Project will finance the following activities for the preparation of the PEPM: (a) a socioeconomic diagnostic of key challenges faced by women and men to reach gender equality in the State of Piauí and (b) regional- and state-level workshops with key stakeholders. Additionally, the Project will provide support for the OPMs and finance an in-depth and gender-sensitive assessment of the productive chains prioritized by PROGERE II.

50. The PEPM is a critical tool for planning, monitoring, and implementing policies and programs that are gender-smart and gender-sensitive. The PEPM will translate the broader gender policy framework into specific objectives and action plans for the period 2017–19. This will enable the GoPi to execute crosscutting policies guaranteeing the rights of women. Furthermore, the PEPM will align the state with gender policy reforms at the national level. The preparation of the PEPM requires a gender-sensitive socioeconomic diagnostic and the convening of regional- and state-level workshops, ensuring the participation of representative social organizations. The Project will support six regional workshops and a state-level conference, with 1,650 people expected to participate, as well as consultant services for logistics,

⁷⁵ Almeida, Patty Fidelis de, et al. 2013. "Strategies for Integrating Primary Health Care with Specialized Care: Parallels between Brazil and Spain" *Saúde em Debate* 37.98: 400–415.

⁷⁶ As per Ordinance No. 1,870/2015, SESAPI approved the State Plan to Prevent, Control and Respond to Neglected Diseases ("*Plano Integrar*") and the Rules of Procedures of the NECEDN at the Health Management Commission comprised by state and municipal representatives (i.e. *Comissão Intergestora Bipartite - CIB*). SESAPI published both documents in the State Official Gazette on October 5, 2015.

planning, and dissemination. The PEPM will propose guidelines and thematic areas to be prioritized by state policies aiming to foster gender equity and women's empowerment.

51. The GoPi is planning to support the creation and operation of 30 municipal OPMs, which are agencies that coordinate, monitor, and evaluate the management of local-level public policies aimed at reducing gender gaps and promoting women's agencies.⁷⁷ Currently, only one OPM is operational in the state. The Project will support the CEPM in developing training and capacity building for the operationalization of the OPMs. To become operational, the OPMs will have to be able to carry out diagnostics of local gender realities, plan interventions, contribute to the preparation of local public policy plans, and monitor and evaluate gender policies.

52. Additionally, the in-depth gender-sensitive assessment of the priority productive chains will inform the SDR in designing a strategic and targeted approach for both women-led and gender-mixed productive organizations. This approach will mainly consist of training and TA packages that address business plan development, certification processes, accessing finance, niche marketing, and business leadership. These activities aim to reduce occupational segregation and the disproportionate difficulties women face in accessing and competing in rural markets as well as to increase (a) the rate of market entry of women-led businesses, (b) women's leadership in business-related decision making, and (c) market outcomes for women-led businesses.

Enhancing Citizen Engagement and Social Accountability

53. The Project will rely on existing institutional arrangements for receiving, registering, and answering grievances as well as for enhancing citizen engagement, which are available through the OGE and its technical support units in each of the key state secretariats and agencies involved in Project implementation. The state has adopted the legal basis to facilitate the access of poor citizens to the OGE services and expedite the response from targeted sectoral agencies to complaints associated with social and productive inclusion services, as established by State Decree 16,150/2015. The Project will contribute to streamlining and standardizing procedures to be followed by the different governmental agencies, technical training of the staff in charge of receiving and handling complaints, and building more effective communication channels and technological solutions for receiving, filing, reviewing, and handling complaints and conflict resolution.

54. The Project will provide support to (a) enhance the OGE's channels and procedures for filing and handling complaints through a web-based interface, a computerized system, a mobile application, and a three-digit hotline; (b) improve the institutional capacity of sectoral secretariats to handle complaints and integrate the ombudsman's network by training their staff and providing the necessary hardware and software to operate the ombudsman's network; and (c) launch an awareness-raising and communication campaign about the ombudsman's network, its role and goals. These measures intend to create a user-friendly system, to increase public awareness about the OGE, to expand citizen engagement, and to speed up handling and

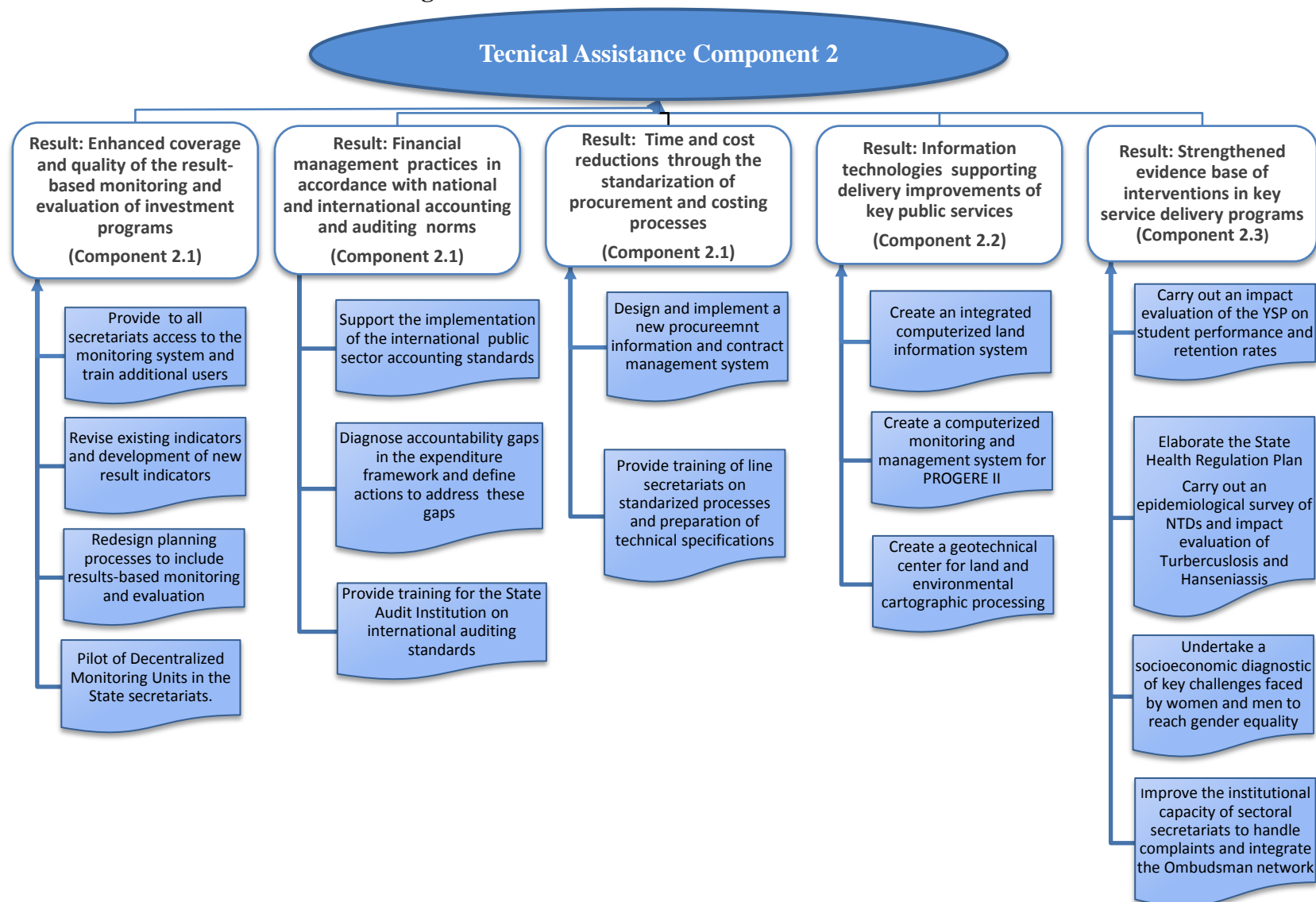
⁷⁷ The OPMs' main objectives are to (a) promote more equitable gender distribution of political decision making; (b) contribute to women's inclusion in the labor market; (c) decrease women's illiteracy and promote women's access to education at all ages; (d) overcome discriminatory and prejudiced behaviors; (e) reduce violence against women; and (f) promote access to health services.

resolution of complaints. The expected outcomes are increases in the system's effectiveness and credibility as well as improvement of its reputation among stakeholders.

Table 2.1 Allocation of TA Funds

Axis/Sector	US\$
Modernize expenditure and investment management in the public sector	3,247,396
Integrated planning, monitoring, and evaluation system	746,667
Public FM	1,064,832
Procurement	807,692
Project Management	628,205
Build the Borrower's capacity for water resources management, land management, and rural development	7,537,179
WRM	1,238,462
Establishment of the CGEO	2,357,692
Modernization of state land administration	2,102,564
Integrated real estate registration system for notaries	876,923
Monitoring and implementation support for PROGERE II	961,538
Generate evidence to support policy making in education, health, gender and citizen engagement	3,915,424
Studies and support for policy evidence in SE	1,711,538
Studies and support for policy evidence in health	1,487,179
Support for gender-smart public policies	358,974
Enhancing citizen engagement and social accountability	357,732
Total for Component 2	14,700,000

Figure 2.6. Results Chain – Technical Assistance



Annex 3: Implementation Arrangements

Project Institutional and Implementation Arrangements

1. The Piauí Project is a multisector operation, covering activities across ten sectors: (a) education; (b) health; (c) WRM; (d) land tenure regularization; (e) rural productive chains; (f) public sector management; (g) public finance management; (h) procurement management; (i) gender; and (j) citizen engagement. Given its nature, the Project will be carried out by 12 implementing agencies: SEDUC, SESAPI, SEMAR; INTERPI, SDR, SEPLAN, SEFAZ, TCE, CGE-PI, SEAD, CEPM and OGE.

Project Administration Mechanisms

2. SEPLAN is the Bank's main interlocutor and coordinator for Project preparation and implementation. To ensure adequate coordination between the implementing entities, SEPLAN will set up within its Super-Intendence of Technical and Financial Cooperation (*Superintendência de Cooperação Técnico-financeira* [SUTEF]) a PIU to oversee overall Project implementation, collect information from other secretariats and associated agencies, and prepare regular monitoring and Project progress reports to be submitted to the GoPi and the Bank. The PIU will also liaise with SEFAZ for all matters related to Project FM reporting, disbursement, and auditing. The PIU will be located in SEPLAN's offices in Teresina.

3. This PIU will comprise key staff responsible for working on and coordinating activities related to strategic planning and day-to-day tasks for the Project management. The PIU's staff will include a Project Coordinator, five professionals for procurement, FM, monitoring and evaluation, safeguards and a technical coordinator, in charge of sector advisors for each sector covered by the Project (sector advisor will be designated by the implementing agencies). These staff will serve as liaisons with the secretariats and agencies involved in Project implementation and will support and provide advice as needed to ensure the Project achieves its objectives and intended impact. The terms of reference and qualifications of the professionals assigned to these positions will be reviewed and found acceptable by the Bank.

4. A Project Management Committee led by SEPLAN and composed of representatives from all the secretariats and associated agencies involved in the Project will be instituted to support overall Project monitoring. This committee will be created no later than two months after effectiveness of the loan through an ordinance including the committee's makeup, attributes, responsibilities, and designation of members, also described in the POM. The committee will meet every six months to discuss Project implementation progress, challenges, and pending actions and these meetings will be registered by meeting minutes. In the biannual meetings, the committee will provide recommendations based on the review of progress reports and other relevant documents prepared for the Project.

5. Specifically, SEPLAN via SUTEF's main responsibilities include the following:

- (a) Ensuring general coordination of the Project with the Bank, state secretariats, and associated agencies.

- (b) Creating a Project Management Committee with structure and functions satisfactory to the Bank, as defined in the POM.
- (c) Participating in the Project Management Committee meetings, ensuring that appropriate measures are taken to meet Project objectives.
- (d) Ensuring timely implementation of all Project activities and monitoring these activities and Project-related indicators. To this end, SEPLAN will organize and hold regular supervision meetings with all participating entities.
- (e) Coordinating with SEFAZ to ensure that progress and financial reports (and other Project-related documents) are prepared as agreed in the Loan Agreement, as well as collecting Project information and results from other participating entities. These reports will be presented with format and content reviewed and found acceptable by the Bank.
- (f) Providing assistance to the participating entities to prepare terms of reference, bidding documents, and contracting, as well as on Project implementation, monitoring, and supervision.
- (g) Ensuring, through the DL, that procurement is carried out following Bank rules and procedures, including the preparation of procurement plans when applicable.
- (h) Leading the preparation of an action plan in the case of a DLI that is not accomplished.
- (i) Hosting and facilitating Bank supervision missions and working with the Bank to optimize Project results and impact.

6. In addition to SEPLAN's FM specialists, two professionals will be designated in SEFAZ to support FM reporting, disbursement, and internal control. The terms of reference and qualifications of the professionals assigned to these positions will be reviewed and found acceptable by the Bank. SEMAR will be responsible for the overall enforcement of Project-related safeguards and will designate a safeguard specialist to liaise and coordinate with all relevant secretariats and agencies.

7. The state secretariats and agencies involved in the Project will be responsible for ensuring timely implementation of their respective EEPs and TA activities using their existing structure, with professional staff within specific divisions/departments responsible for the execution and monitoring. The roles and specific responsibilities of the secretariats and associated agencies are described below.

8. **Expanding retention in public SE and generate evidence to support policy-making and practice in education.** The SEDUC will be responsible for the planning and implementation of activities under Subcomponent 1.1 and TA under Subcomponent 2.3. The main interlocutor with the Bank will be the director of SEDUC's Planning Unit, which will be responsible for implementing the programs/actions with direct support from the following units: the Superintendence of Teaching, Teaching and Learning Unit, Management of Secondary Education, Technical and Vocational Education Unit, Technology-Mediation Education Unit, and the Full Time School Management Unit. As enabling units, Procurement Management and Management of Special Projects will also be directly involved in implementation as needed.

9. **Expanding access to health care for patients with chronic diseases and generate evidence to support policy-making and practice in health.** The SESAPI, under the supervision of the Vice Secretariat of Health, will be responsible for the planning and implementation of health-related activities under Subcomponent 1.2 and TA under Subcomponent 2.3. SESAPI will

be supported by four coordinating units: Health Care, Engineering and Architecture, Planning, and Health Assistance. Architectural planning for construction works under Subcomponent 1.2 will be completed by teams within SESAPI, with complementary work carried out by consultancies. The Bank will provide cross support, particularly in designing the role and function of the new SCCDs within the existing health system.

10. Expanding the registration of groundwater users and build state capacity for WMR. SEMAR will be responsible for the planning and implementation of WRM activities under Subcomponent 1.3 and TA under Subcomponent 2.2. The creation of an electronic public platform for the CERH database and carrying out of municipal work programs and information dissemination campaigns will be the responsibility of the Water Resources Management Division under the SRH. The Water Resources Management Division will also carry out verification of water user registrations, along with the Division of Supervision of the Environmental Directorate. The CGEO (Component 2) will be developed under the supervision of the SRH until a new fully dedicated entity is legally created.

11. Strengthening real property rights and build capacity for land management. INTERPI will be responsible for the planning and implementation of land tenure regularization and land management activities under Subcomponent 1.4 and TA under Subcomponent 2.2. INTERPI will be responsible for the identification and definition of target sites, mobilization of communities, cadastral record collection activities, geo-referencing, cartographic plotting, and titling of rural land. While in some instances, these activities will be conducted by the in-house staff of INTERPI, a part of the tenure regularization target will be met by INTERPI subcontracting and supervising private firms that provide geo-referencing, cartographic plotting, and titling services. As it has been the practice under a technical cooperation agreement, INTERPI will continue to receive support from INCRA, particularly in the geo-referencing of properties. As its currently its role, the CGJ will continue to be responsible for the application of administrative rules to disputed properties, leading to the cancellation of fraudulent titles in some cases. The CGJ will continue to supervise and train notaries, and provide technical inputs into the design and procurement of the integrated real estate registration system for notaries under Subcomponent 2.2, including for equipment, software, and associated services. SEPLAN will prepare a cooperation agreement with INTERPI for the implementation of activities included under sub-components 1.4 and 2.2.

12. Strengthening participation of poor women and *Quilombola* communities in rural productive chains and build capacity for rural development. The SDR will be responsible for the planning and implementation of PROGERE II activities under Subcomponent 1.5 and TA under Subcomponent 2.2. Implementation will be carried out through the SDR's technical, administrative, financial, and legal management units. The Superintendence of Family Agriculture will carry out general coordination of the management units for PORGERE II. The Directorate for Combating Rural Poverty will carry out technical coordination along with the Directorate of Family Agriculture, which will oversee the technical operations staff under the two directorates. All implementing units will be directly accountable to the SDR. Financial coordination will be carried out by the SDR's Directorate of Financial Administration and it will receive legal support from the secretary's cabinet. The SDR will also work in partnership with other institutions, including the Association of Municipal Mayors of Piau , Piau  State Agriculture Federation, Piau  Small and Micro Enterprise Support Service, Brazilian Agricultural

Research Corporation, and the chambers of commerce for apiculture, cashew production, and goat farming, and local officials in the target territories of Serra da Capivara, Vale do Canindé, Vale do Sambito, Cocais, Carnaubais, Planícies Litorâneas, and Vale do Piauí Itaueira.

13. **Integrated Results-based Planning, Monitoring, and Evaluation.** SEPLAN will be responsible for the planning and implementation of activities related to SIMO under Subcomponent 2.1. Particularly, the Superintendence of Strategic Planning will coordinate the implementation involving the Coordination Units of Public Policy Monitoring and of Managerial Information within the Units of Strategic Planning.

14. **Public FM.** SEFAZ, the CGE-PI, and TCE-PI will be responsible for the planning and implementation of activities related to public FM under Subcomponent 2.1. Working groups will be established within SEFAZ for the PEFA; (b) TCE-PI for adoption of the INTOSAI standards; (c) CGE-PI for the implementing the recommendations of the IA-CM assessment. SEFAZ/SEPLAN will prepare a cooperation agreement with TCE for the implantation of activities included under sub-component 2.1 part (b).

15. **Procurement.** The SEAD will be responsible for the planning and implementation of activities related to capacity building for procurement under Subcomponent 2.1. Particularly, the DL on behalf of SEAD will carry out all activities, including preparation of terms of reference, bidding documents, and procurement processes necessary for the acquisition and installation of the new procurement information and contract management system. If necessary, the DL will hire individual consultants to support the preparation of terms of reference and bidding documents.

16. **Generate evidence to support policy-making and practice in gender.** The CEPM will be responsible for the planning and implementation of activities under Subcomponent 2.3 related to carry out a socio-economic diagnostic and assessment of gender challenges and an in-depth analysis of gender-sensitive assessment of the productive chains prioritized by PROGERE II. In addition, CPEM will support the creation of OPMs in targeted municipalities. The main interlocutor with the Bank will be the General Coordinator of State Policies for Women, who will supervise the planning, implementation, monitoring and evaluation of the programs/actions to be directly implemented by the CEPM's Directorate of Planning and Management of Policies for Women and Directorate of Institutional Articulation and Thematic Actions. Under these two directorates, activities will be supported by the Management Unit of Promotion of Policies for Women and the Coordination of Inter-Municipal Articulation and Social Control.

17. **Expanding citizen oversight and social accountability and generate evidence to support policy-making and practice in citizen engagement.** The OGE will be responsible for the planning and implementation of activities under Subcomponent 2.3. The OGE will be in charge of periodically reporting on the number of accesses to the system made by state citizens and the effectiveness of the grievance redress mechanism. The main interlocutor with the Bank will be the State General Ombudsman.

18. **POM.** SEPLAN has prepared a POM satisfactory to the Bank, which includes, among others, (a) performance indicators described in the RF; (b) procedures for the implementation and monitoring of the Project; (c) detailed criteria for the monitoring of DLIs; (d) procurement

and financial requirements of the Project; (e) roles and responsibilities of each secretariat and agency; (f) the ESMF; (g) the Involuntary Resettlement Framework; (h) the Environmental Management Plan for PROGERE II, (i) the HWMP; (j) the Project chart of accounts and internal controls, reporting procedures, and the format of interim unaudited financial reports; (k) model of cooperation agreement; (l) specific requirements and percentages for the execution rules applicable to each withdrawal; and, (m) the disbursement mechanisms for the EEPs 1 and 15.

Financial Management, Disbursements and Procurement

Financial Management

19. The Bank performed an assessment of SEPLAN's FM arrangements in accordance with OP/BP 10.00 and the Financial Management Practice Manual.⁷⁸ The FM risk of the Project has been assessed as Substantial, given the state's challenges and Project implementation arrangements, which include several budget executors, and considering that Project funds will be used to finance a large volume of transactions. The FM coordination arrangements within SEPLAN and the use of the state's FM procedures and integrated FM system will help mitigate these risks. In addition, SEFAZ will allocate dedicated FM specialists to carry out the various FM tasks detailed in the POM. The FM specialist will assure smooth flow of information and observance of Project arrangements within all participating entities. SEFAZ will be responsible for supplying the budget expenditure data that will be needed for disbursements. The overall conclusion of the assessment is that the planned FM arrangements are considered adequate. Table 3.1 summarizes the FM risk assessment.

Table 3.1. FM Assessment and Risk Ratings

Risk	Risk Rating	Risk and Mitigation Measures
Country Level	M	A strong legal and institutional framework that clearly specifies roles and responsibilities underpins the public FM environment in Brazil. A public accountability law regulates financial controls, budgeting, and reporting at the federal, state, and municipal levels. However, there have been instances of corruption and leakages of public funds and the reports of supreme audit institutions regularly contain examples of noncompliance with relevant requirements. Although these may not compromise the overall management of public finances, they may represent some risks, which the Federal Government is committed to addressing. A number of initiatives have been introduced at many levels of government aimed at increasing the efficiency of public expenditure.
Subnational (State) Level	M	Public FM review conclusions were positive; however, this is the first operation to use GoPi's public FM systems.
Entity Level	H	Implementation arrangements involve several secretariats that do not have experience working with external donor-financed Projects. Due to the number of implementing agencies, the program will face challenges in monitoring the use of funds and in coordinating the implementing agencies. Mitigation measures: The POM will stipulate the respective responsibilities of public agencies in the program. This is expected to help remove latent overlaps and confusion and address key issues of monitoring and coordination. Arrangements for Bank capacity-building activities will be made for SEFAZ to undertake FM aspects of the Project.

⁷⁸ Issued by the Financial Management Sector Board on March 1, 2010.

Risk	Risk Rating	Risk and Mitigation Measures
Project Level	H	Institutional arrangements feature multiple implementing agencies with multiple activities, disbursement mechanisms, and control issues. Mitigation measures: SEPLAN will lead and coordinate the implementing agencies' activities. To improve the Project's FM arrangements, SEFAZ and the Bank FM specialist will provide support and training to the involved implementing entities.
Overall Inherent Risks	H	
Budget	S	The budget may not properly reflect the planned expenditures of all the implementing entities. Mitigation measures: The budget preparation process will involve implementing entities and will adopt clear budget preparation procedures. Clear instructions will be given to implementing agencies on how to prepare their proposals and a clear budget classification system will be used to ensure the accurate identification of planned expenditures.
Accounting	M	Mitigation measures: Proper accounting and monitoring of monthly balances of Government accounts. The SIAFEM system will be enhanced during Project execution.
Internal Controls	M	The CGE-PI has sufficient independence and qualified staff to carry out regular internal control reviews. However, the Project will still face significant internal control challenges. The POM will outline the procedures to be followed. Mitigation measures: Periodic reviews of the processes under the Project will be undertaken by the CGE-PI. The Project's FMS will work with the PIU and CGE-PI staff to establish a strict control for the YSP and PIPs program.
Funds Flow	M	One Designated Account (DA) will be used for the project for the TA, and an acceptable account designated by the Borrower for the EEPs.
Financial Reporting	M	Mitigation measures: Regular financial reporting will be modified for the multi-year (Project-to-date) Project reporting requirement and Project disbursement indicators. The Bank will closely supervise disbursement indicator calculations.
Auditing	M	The complexity and size of the operation will require a higher level of audit resources and a large audit scope. Mitigation measures: The Bank will ensure that audit terms of reference contain sufficient scope of duties. The Bank will ensure that the TCE-PI, which has expressed preliminary interest in conducting the audit, has sufficient capacity to undertake the audit. If this capacity is deemed insufficient, SEPLAN will hire independent auditors using the Bank's rules and procedures.
Overall Control Risk	S	

Institutional Arrangements, Staffing, and Internal Control Systems

20. The FM functions will be spread across the different state secretariats and will be undertaken by qualified professionals who understand the Bank's policies and procedures and possess the education levels, experience, and knowledge to adequately execute them. SEFAZ should contemplate having at least two staff responsible for the various supporting FM tasks and for ensuring smooth flow of information and observance of Project arrangements within all Project executors, on reporting and disbursements. These two staff will be trained on Bank FM arrangements no later than the first quarter of Project implementation. In addition, SEFAZ should put in place the necessary arrangements to regularly monitor the use of funds and provide guidance to the Project executors.

21. A flow chart of the payment cycle of the EEPs, including documentation and reconciliation aspects, has been prepared to avoid lapses and redundancy in the current payment and documentation processes. A review of the current payment and documentation processes will facilitate not only the streamlining of the payment procedures, but also the closing of current gaps and addressing deficiencies. The POM documents these Project processes and serve as an important resource for processing steps during Project implementation. It contains detailed procedures and guidelines for disbursements, approvals, commitments, payments, and reporting. In addition, the CGE-PI will closely monitor Project activities and provide support for adoption of a comprehensive internal control system.

Budgeting

22. The GoPi follows the Brazilian Accounting Rules, Federal Law 4,320/1964 that establishes certain high-level accounting principles and the Accounting Manual applicable to the public sector, issued under Federal Law 10,180/2001 and Federal Decree 3,589/2001. The Project requires adherence to these national accounting standards applicable to the public sector as well as the revised Accounting Manual issued under Brazilian National Treasury Ordinance 467/2009. The last Country Financial Accountability Assessment for Brazil indicated that Law 4,320/1964 was in line with international accounting standards.

23. The budget cycle includes planning and implementation of all Government activities, which are to be reflected in the PPA, Budget Guidelines Law (*Lei de Diretrizes Orçamentárias*), and LOA.⁷⁹ The GoPi's SIAFEM keeps all accounting records and is used by all GoPi institutions that receive/transfer Government funds. GoPi accounting management is the responsibility of SEFAZ. Each secretariat has administrative and finance professionals responsible for approving respective payments in accordance with the LOA. SEPLAN will execute Component 1 and part of Component 2, which will also be implemented by other secretariats and agencies as described in annex 2. Project execution should observe budgetary laws and respective procedures. The Project's annual budgeting will be based on the budget execution for Component 1 and the procurement plan for Component 2, which will be regularly updated during implementation. Annual budgets will be prepared by each executing secretariat and consolidated and submitted by SEFAZ to SEPLAN. The approved annual budget will be entered into the SIAFEM and used for periodic comparison with actual results as part of interim reporting. The updated budgetary execution figures of the combined budgets for the EEPs will form the basis for disbursements.

Accounting System and Records

24. The accounting for both Project components will use the SIAFEM, as disbursements for Component 1 (EEPs) of the Project will be based on a budget line representing expenditures paid during the reporting period. While preparing accounting and financial information, transactions under both components will be recorded as paid and all primary supporting documentation will be maintained to facilitate ex post reviews and annual external audits. Such documents should be maintained for a minimum of five years.

⁷⁹ The PPA, Budget Guidelines Law (*Lei de Diretrizes Orçamentárias*), and LOA include the GoPi's goals and programs approved by the state congress every five years, 18 months, and 12 months, respectively.

Disbursements

25. **Under Component 1**, disbursements would follow a DLI-based financing approach, with loan funding contributing to the implementation of the existing Eligible Expenditures Programs (EEPs) of the State of Piauí and achievement of specific results that would trigger disbursements according to the following mechanisms:

- (a) Disbursements will be made against presentation of expenditures made under predefined EEPs corresponding to SEDUC, SESAPI, SEMAR, INTERPI and SDR, compliance with DLIs achievement. Loan disbursements will be tagged in the state's budget system as co-financing the EEPs but funds will be disbursed to the state's treasury.
- (b) SEPLAN will budget and approve each EEP annually and assign the same budget code used in the PPAs for 2012-15 and 2016–19, as indicated in the EEP table (table 3.4). The Bank and the Borrower may jointly review the amounts assigned to the EEPs per budget code once a year and adjust it in a manner satisfactory to the Bank. The SIAFEM will track and report budget estimates and actual expenditures.
- (c) The Bank will finance a percentage against the aggregate actual incurred expenditures (payments and transfers to SE students under YSP and eligible beneficiaries under PIPs) under EEPs and not a percentage of a payment (or contract) as in traditional IPFs. In this case, a financing percentage up to 80 percent has been agreed upon and will form the upper limit for the amount to be disbursed against aggregate EEPs. Thus, to disburse an amount that represents 80 percent of the aggregate EEP, the borrower shall present such amount times 1.25 in expenditures under the EEPs, out of which at least 80 percent must follow the Bank's procurement rules.⁸⁰
- (d) Disbursements will be made in nine reimbursements for actual EEPs through the submission of the EEP Spending Report covering the period preceding to withdrawal request, in accordance to the instructions provided in POM and in the Disbursement Letter.
- (e) The first reimbursement will take place immediately after loan effectiveness as retroactive financing and, as such, will cover up to 12 months before loan signature but on or after March, 2015 and will not exceed US\$21 million.
- (f) The following eight reimbursements will be made in the months of February and August of each year against actual expenditures for the EEPs incurred in the previous six-month period, defined as January to June and July to December of each calendar year of project implementation.
- (g) Additionally, starting in January of the first year of project implementation, reimbursements will take into account SEDUC, SESAPI, SEMAR, INTERPI and SDR compliance with DLIs to be verified by the end of each six-month period (by June 30 and December 31 of each year) in accordance with the agreed targets and schedule for each indicator and protocols of verification (See Table 3.6). The project has a total of 15 DLIs. Each DLI has the same weight to compose the total disbursement amount per period and a protocol detailing how it will be measured and by which sources. Proposed disbursement amounts per period take into account technical premises, expected budget

⁸⁰ For instance, to disburse US\$10 million, the borrower shall present US\$12.5 million in expenditures under the EEP, where at least US\$10 million shall comply with the Bank's rules for procurement.

allocation, and executors' spending capacity. The disbursement table (table 3.3) details the disbursement conditions for each period.

- (h) If a DLI target is not fully achieved, an amount proportional to the extent to which the DLI was met will be disbursed up to the DLI value, except for the DLIs that do not have quantitative targets. SEDUC, SESAPI, SEMAR, INTERPI and SDR, as the case may be, with the assistance of SEPLAN and the Bank, will agree on an action plan to ensure that each DLI target is fully achieved under the project, and the amounts withheld for each unmet DLI will be paid in the subsequent withdrawal application when the DLI is achieved.
- (i) The GoPi will select and contract an IVE not later than 18 months after effectiveness, to carry out two technical reviews of agreed results during the project's life. The first review shall be completed before the fourth disbursement, and the second before the eighth disbursement take place.

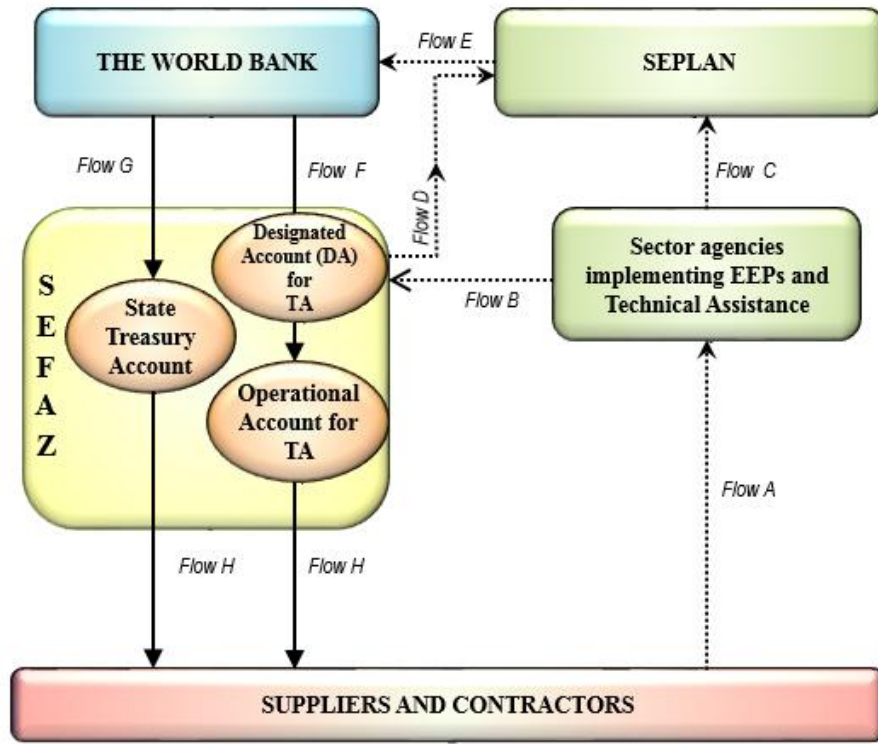
26. Before the fifth disbursement, a project MTR will be conducted to evaluate, among other project aspects, the performance of the indicators included in the results framework and the accomplishment of the project DLIs. The MTR will determine if any new DLIs should be incorporated or existing DLIs should be modified in line with the disbursement mechanism/modalities used by the project.

27. Rollover of amounts not disbursed:

- (a) If the Bank has not received evidence of full compliance with: (i) quantitative DLIs (DLIs 1, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14 and 15), then the Bank shall disburse the amount allocated to the corresponding DLI in proportion to the degree of achievement; (ii) qualitative DLIs (DLIs 2 and 6), then the Bank will not authorize the related disbursement. As soon as the applicable DLIs (quantitative or qualitative) have been fully achieved, the amount reduced in the previous withdrawal can be disbursed only if at the time of the subsequent withdrawal, the Borrower has submitted documentation of eligible expenditures incurred under the EEPs in the amount of at least 1.25 times the withdrawal amount requested.
- (b) The amounts carried forward due to lack of documentation of eligible expenditures in the amount of at least 1.25 times the amount requested for withdrawal, may be disbursed at the time of the subsequent withdrawal only if such amount of eligible expenditures is then submitted.

28. **Under Component 2**, disbursements will be made through advances provided to a DA. It will be denominated in U.S. dollars and maintained at the *Banco do Brasil* account, in name of SEFAZ and identifying the project. The DA will have a fixed ceiling of US\$1,500,000.00. Disbursements will be documented on the basis of Statement of Expenditures submitted each semester, or more frequently, if needed. The SEFAZ will manage the DA, which will be segregated, and will operate a local currency account to finance project expenditures in local currency, to which funds from the DA, denominated in U.S. dollars, will be periodically transferred. As eligible expenditures are incurred, SEFAZ will withdraw the amount to be financed by IBRD from the DA.

Figure 3.1. Disbursement Arrangements and Flow of Funds



—————> - Flows involving the movement of funds
 - - - - -> - Flows involving documentation or supply of goods and services

- Flow A - Suppliers provide goods and services, and related invoices
- Flow B - Sector agencies submit payment requests to SEFAZ
- Flow C - Transaction data provided to SEPLAN through access to SIAFEM
- Flow D - SEFAZ provide bank statements to SEPLAN
- Flow E - IFRs and Requests for disbursement submitted to Bank by SEPLAN
- Flow F - Disbursements in respect of Technical Assistance
- Flow G - Disbursements in respect of EEPs on a reimbursement basis
- Flow H - Payment to suppliers and contractors

Note
 1 - The Designated Account is part of the State's Single Treasury Account that is managed by SEPLAN.

29. The FM arrangements proposed to control YSP and PIPs (flow of funds, reporting and internal control mechanisms) were considered acceptable. Detailed funds flow charts are included in the POM.

Interim and Annual Reporting

30. All FM information will be consolidated by SEFAZ (including reports from other secretariats confirming achievement of agreed milestones). SEFAZ will be responsible for

submitting IFRs by component, budget line, and activity, to the Bank for both monitoring and disbursement purposes. The IFRs should follow the format of the GoPi's existing reporting to the extent possible. For reasons of FM monitoring, the FM specialists in SEPLAN and SEFAZ will prepare consolidated IFRs in the currency of the borrower (as detailed below) on a cash accounting basis and submit them to the Bank no later than 45 days after the end of each semester. The IFRs will be subject to the Bank's supervision and the Internal Controllershship Unit and External Auditors' reviews.

31. The IFRs will show compliance of the DLIs, demonstrations of expenditures incurred under the EEPs every semester and will be submitted for Bank's approval. The IFRs format will be attached to the disbursement letter and will be included in the POM. If an agreement is reached between the Bank and the borrower, the following reports may be adjusted during Project implementation:

- (a) IFR 1-A: Statement of sources and uses of funds by component/subcomponent cumulative (Project-to-date; year-to-date) and for the semester.
- (b) IFR 1-B: Statement of EEPs Spending Report informing the period execution by budget line showing budgeted amounts versus actual expenditures, including execution percentage.
- (c) IFR 1-C: DLIs Compliance Report informing the DLIs achievement for the period.
- (d) IFR 1-D: Reconciliation of DA for Component 2 (bank account statement attached).

32. The IFR will also include the Project's annual financial statements, including the notes to the financial statements.

External Audit Arrangements

33. The Project's financial statements will be audited in accordance with the Bank's audit policy and guidelines.⁸¹ The audit report should be delivered to the Bank within six months after the end of each calendar year, as stated in the Bank's FM audit guidelines and the Loan Agreement. The audit will be conducted in accordance with the terms of reference prepared by SEFAZ and deemed acceptable to the Bank. The latter will declare no objection to these terms of reference within six months after signing the loan and attach it as an annex to the POM. The scope of the audit report will include a full review of the fourth IFR (for each calendar year) and of the SEFAZ's transactions in SIAFEM. The audit report will include an opinion on the Project's financial statement and a management letter on internal control weaknesses and will follow up on corrective actions in subsequent audits on the GoPi's implementation. Auditors should have access to all supporting records and should be able to carry out onsite examinations of subprojects. The Project's auditors will be selected to meet the Bank's criteria on independence and competence. The TCE-PI has the mandate to audit all state expenditures, including those that will be financed under the Project. The TCE-PI has expressed interest in conducting the audit and will formally communicate their final decision to SEPLAN and SEFAZ. The Bank will review the capacity of the TCE-PI to carry out the audit, concluding this review within six months after loan negotiations.

⁸¹ Issued by the Financial Management Standards Board on June 30, 2003 and in accordance with International Standards on Auditing issued by the International Federation of Accountants.

34. All supporting records will be maintained at SEFAZ for at least two years after the Project's closing date or one year after the Bank has received the audited financial statements covering the period during which the last withdrawal from the loan account was made, whichever is later.

FM Supervision Arrangements

35. As part of Project supervision missions (at least twice a year), the Bank will conduct risk-based FM supervisions. These will focus on (a) Project accounting and internal controls; (b) budgeting and financial planning arrangements; (c) unaudited IFRs; (d) audit reports, including financial statements and remedial actions recommended in the auditor's management letters; (e) disbursement management and financial flows, including counterpart funds, as applicable; and (f) any incidence of corrupt practices involving Project resources.

Table 3.2. Allocation of Loan Proceeds

Category	Amount of the Loan Allocated (US\$)	Percentage of Expenditures to be Financed (Including Taxes)
(1) EEPs under Component 1	105,000,000	80% of aggregate EEP expenditures
(2) Goods, consultants' services, non-consulting services, training, and operating costs under Component 2	14,700,000	100%
Front-end Fee	300,000	Amount payable pursuant to Section 2.04 of the Loan Agreement in accordance with Section 2.07 (b) of the General Conditions
TOTAL AMOUNT	120,000,000	

Table 3.3. Tentative Disbursement Schedule for Component 1

Disbursement		Disbursement Type	Planned Disbursement Amount (US\$)	Requirements
No.	Estimated Date			
1	January 2016	Retroactive – March 1, 2015 to loan signing	21,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$26,250,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$21,000,000
2	August 2016	Reimbursement of expenditures incurred in the first calendar semester of 2016 after the date of loan signing (loan signing to June 2016)	5,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$6,250,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$5,000,000 • Compliance with DLIs
3	February 2017	Reimbursement of expenditures incurred in the second calendar semester of 2016 (July 2016 to December 2016)	10,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$12,500,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$10,000,000 • Compliance with DLIs
4	August 2017	Reimbursement of expenditures incurred in the first calendar semester of 2017 (January 2017 to June 2017)	11,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$13,750,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$11,000,000 • Compliance with DLIs
5	February 2018	Reimbursement of expenditures incurred in the second calendar semester of 2017 (July 2017 to December 2017)	12,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$15,000,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$12,000,000 • Compliance with DLIs

6	August 2018	Reimbursement of expenditures incurred in the first calendar semester of 2018 (January 2018 to June 2018)	11,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$13,750,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$11,000,000 • Compliance with DLIs
7	February 2019	Reimbursement of expenditures incurred in the second calendar semester of 2018 (July 2018 to December 2018)	12,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$15,000,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$12,000,000 • Compliance with DLIs
8	August 2019	Reimbursement of expenditures incurred in the first calendar semester of 2019 (January 2019 to June 2019)	12,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$15,000,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$12,000,000 • Compliance with DLIs
9	February 2020	Reimbursement of expenditures incurred in the second calendar semester of 2019 (July 2019 to December 2019)	11,000,000	<ul style="list-style-type: none"> • Expenditures under EEPs of at least US\$13,750,000 • Submit evidence of the expenditures were procured in accordance with Bank procurement rules of an aggregate value of not less than US\$11,000,000 • Compliance with DLIs

Table 3.4. EEPs (Expressed in R\$)

Budget Code	Eligible Expenditure Programs (EEP)	2015	2016	2017	2018	2019	2020	Total
Sub-component 1.1: Improving retention in state public secondary education								
14102.12362122.078	Support for <i>Educando</i> Program – Secondary Education (SE)	70,114,532						70,114,532
14102.12362122.120			34,356,095	37,791,705	41,570,875	45,727,962	50,300,759	209,747,396
14102.12368121.120	Infrastructure Expansion and Improvement – Democratization of Access to Basic Education	120,829,807						120,829,807
14102.12368122.312	Restructuring and maintenance of information technology in the schools of the network		12,942,250	14,236,772	15,660,449	17,226,494	18,949,144	79,015,379
14102.12366122.115	Expansion and restructuring of the state network of youth and adult education		4,270,000	4,697,000	5,166,700	5,683,370	6,251,707	26,068,777
1410.201368122.120	Expansion and improvement of the full-time schools		28.131.473	30.944.620	34.039.082	37.442.991	41.187.290	171.745.456
1410.212362121.120	Youth Saving Program of Piauí		14,718,000	16,189,800	17,808,780	19,589,658	21,548,624	89,854,862
14102.12362121.121	Expansion of SE, including the use of technological mediation	12,570,000						12,570,000
14102.123681122.130			170.507.672	187.558.439	206.314.283	226.945.711	249.640.283	1.040.966.388
14102.12363112.232	Expansion and maintenance of the E-Tec network		1.565.000	1.721.500	1,893,650	2,083,015	2,291,317	9,554,482
14102.12368122.081	Implementation of state student assessment system for basic education - SAEPI	5,302,500						5,302,500
14102.12368122.114			6,910,000	7,601,000	8,361,100	9,197,210	10,116,931	42,186,241
14102.12368122.079	Maintenance of the state network for basic education	134,689,047						134,689,047
14102.12363121.122	Expansion and improvement of technical (professional)	21,610,000						21,610,000

Budget Code	Eligible Expenditure Programs (EEP)	2015	2016	2017	2018	2019	2020	Total
14102.12363112.234	education utilizing technological mediation		53,371,805	58,708,986	64,579,884	71,037,872	78,141,660	325,840,207
Sub-total	SEDUC	365,115,886	326,772,565	359,449,822	395,394,804	343,934,284	478,427,712	2,360,095,073
Sub-component 1.2: Expanding access to healthcare for patients with chronic diseases								
17101.10122031.360	Strengthening the state financing policy through the public health co-financing system	42,000,000						42,000,000
17101.10301032.132			47,200,398	51,920,438	57,112,482	62,823,730	69,106,103	288,163,150
17101.10301032.288	High and medium complexity support in ambulances and hospitals	111,910,000						111,910,000
17101.10301032.220			149,544,435	164,498,879	180,948,766	199,043,643	218,948,007	912,983,730
Sub-total	SESAPI	153,910,000	196,744,833	216,419,316	238,061,248	261,867,373	288,054,110	1,355,056,880
Sub-component 1.3: Expanding the registration of groundwater users								
28101.18544171.320	Creation of the cadaster and users of water resources	29,603,750						29,603,750
28101.18542171.128				1,965,000	2,161,500	2,377,650	2,615,415	2,876,957
28101.18544171.071	Elaboration of studies and Projects, and creation of instruments to support water resources managements		1,709,990	1,880,989	2,069,088	2,275,997	2,503,596	10,439,660
28101.18544172.172	Implementation and operationalization of monitoring networks of water resources of the State		3,304,160,	3,634,576	3,998,034	4,397,837	4,837,621	20,172,227
Sub-total	SEMAR	29,603,750	6,979,150	7,677,065	8,444,772	9,289,249	10,218,174	72,212,159

Sub-component 1.4: Strengthening real property rights								
15201.21127231.193	Land regularization through isolation of state land	25,523,960						25,523,960
15201.21127241.236	Management of state public land for fulfillment of the social function of rural property		30,292,279	33,321,507	36,653,658	40,319,023	44,350,926	184,937,393
15201.21127231.190	Land regularization and formalization of informal settlements	7,476,040						7,476,040
Sub-total	INTERPI	31,000,000	30,292,279	33,321,507	36,653,658	40,319,023	44,350,926	215,937,393
Sub-component 1.5: Strengthening participation of rural family farmers in rural productive value chains								
15101.20244051.290	Institutional development/PROGERE	413,926						413,926
15101.20244052.210	Development and implementation of rural poverty programs	10,656,395						10,656,395
15101.20244052.249	Elaboration and execution of programs combating rural poverty		8,660,000	9,526,000	10,478,600	11,526,460	12,679,106	52,870,166
15101.20244052.219	Administration, supervision, monitoring and assessment of PROGERE	12,875,321						12,875,321
15101.20601222.210	Strengthening of family agriculture		12,745,000	14,019,500	15,421,450	16,963,595	18,659,955	77,809,500
15101.20602221.269	Restructuring of rural productive chains, sheep and goat farming, fish farming, pig, beekeeping, poultry farming, dairy farming, fruit growing, etc.		13,365,000	14,701,500	16,171,650	17,788,815	19,567,697	81,594,662
15101.20244252.283	Administration, supervision, monitoring and evaluation		1,881,000	2,069,100	2,276,010	2,503,611	2,753,972	11,483,693
Sub-total	SDR/PROGERE II	23,945,552	36,651,000	40,316,100	44,347,710	48,782,481	53,660,729	247,703,662
Total Eligible Expenditure Programs (R\$)		603,575,278	597,439,827	657,183,810	722,902,191	795,192,410	874,711,651	4,251,005,166
Total – Eligible Expenditure Programs (US\$)		158,835,600	157,221,007	172,943,108	190,237,419	209,261,160	230,187,277	1,118,685,570
Bank Financing for Component 1 (US\$)		21,000,000	5,000,000	21,000,000	23,000,000	24,000,000	11,000,000	105,000,000
% Bank Financing		13.2%	3.2%	11.0%	12.6%	11.9%	4.8%	9.4%

Note: The estimated costs of the EEPs are based on the Government's PPAs for 2012-15 and 2016-19.
Exchange rate US\$1 = R\$3.8

Table 3.5. DLIs and Targets

#	DLIs	Unit of Measure	Disbursement Targets								Protocol for Verification/Source of Information
			2	3	4	5	6	7	8	9	
Sub-component 1.1: Improving retention in public secondary education											
1	Students enrolled in the YSP who pass to the next grade	Number	n.a.	8,900	n.a.	18,900	n.a.	30,700	n.a.	43,400	Number of students registered in the program successfully completing the school year (noncumulative)
2	Tutoring activities for and monitoring of attendance of SE students enrolled in the YSP	Text	Yes	n.a	Yes	n.a	Yes	n.a	Yes	n.a	SEDUC will carry out qualitative survey on a small set of SE schools (no less than 5) to report on types of intervention carried out by the schools and regional education departments aimed at supporting retention and passing rate of students enrolled in YSP
3	Secondary FTS certified	Number	n.a.	6	n.a	12	n.a	18	21	24	Schools meeting all the conditions to operate as FTS according to the state council for education

4	Students enrolled in STE (integrated and concomitant)	Number	20,000	n.a.	41,000	n.a.	65,000	n.a.	92,000	n.a.	Students enrolled in STE schools, excluding enrollment in e-Tec (federal program providing technical education through distance learning) and ETI (general SE)
5	Students enrolled in ETI	Number	1,800	n.a.	4,700	n.a.	8,700	n.a.	13,500	n.a.	Number comprises SE students studying entirely through ETI and students who will only have ETI classes for specific subject matters. Figure provided by the Piauí Educational Management System (SISGEPI) three months after the beginning of the school year
6	Learning assessment tests carried out in public SE and results disseminated at the school level	Text	n.a.	First state learning assessment test carried out in SE		First test results disseminated at state and school level	n.a.	Second state learning assessment test carried out in SE		Second test results disseminated at state and school level and to parents	SEDUC will carry the state assessment test for at least 2 subject matters and in at least one grade in SE on a census basis.

Sub-component 1.2: Expanding access to health care for patients with chronic diseases											
7	SCCDs operational to receive patients for diagnosis, treatment and follow up	Number	n.a.	1	n.a.	2	n.a.	4	n.a.	5	SCCDs are operational when the civil works, rehabilitation, and equipping of the centers is complete; it can perform specialist consultation, lab and image tests for patients; and can cover related operating costs
8	Clinical protocols developed	Number	2	4	5	8	10	13	17	n.a	Protocols proposed in the beginning of the Project, as listed in the POM, that have been developed and are in use by the regulation units. Seventeen protocols have been identified by SESAPI for implementation
9	FHTs and health specialists who have been trained in the use of clinical protocols	Percentage	n.a.	n.a.	20	50	60	75	90	95	FHTs per municipality is included in the POM and will need to be updated annually. The first trainings will take place in year 2 of the Project and will be on the first 4 protocols developed in year 1. The trainings will be updated annually to include the new protocols developed.

Sub-component 1.3: Expanding the registration of groundwater users											
10	Self-registered groundwater users in the CERH electronic database	Number	800	2,000	3,500	5,000	7,500	10,000	12,000	15,000	List of groundwater users who complete the registration form in the CERH electronic database
11	Field visits carried out by SEMAR to verify the registration of groundwater users	Number	n.a.	20	30	40	60	100	120	150	Field visits for registration and verification of groundwater use in accordance with the water use right granted
Sub-component 1.4: Strengthening real property rights											
12	Teams in place to execute the land tenure regularization activities	Number	n.a.	6	6	8	8	10	10	10	Number of field teams operational and working on land tenure regularization and state land demarcation
13	Requests filed by small-scale farmers for land titles through the state LTRP	Number	n.a.	5,000	6,000	7,000	8,000	9,000	10,000	11,000	Includes both pending and completed requests registered by INTERPI since the adoption of the State Law 6,127/2011. Small-scale farmers are those who possess and cultivate less than 100 ha

Sub-component 1.5: Strengthening participation of rural family farmers in rural productive value chains											
14	PIPs proposed by producer organizations led by and mostly comprising poor rural women or <i>Quilombola</i> communities	Number	n.a.	n.a.	4	9	19	27	33	36	PIPs are business plans for agricultural activities implemented by farm cooperatives. Preparation, approval, and financing of PIPs are described in the POM.
15	PIPs benefiting poor rural women or <i>Quilombola</i> communities monitored using PROGERE's new Information Management System	Percentage	n.a.	10	20	30	40	50	55	60	Ratio of PIPs benefiting poor rural women or <i>Quilombola</i> communities with information registered and analyzed through the SIG and the total number of PIPs approved that benefit poor rural women or <i>Quilombola</i> communities

Note: The first disbursement is retroactive and compliance with the DLIs as a disbursement condition starts with the second disbursement. Baselines for the DLIs are spelled out in the RF (annex 1). There are 15 DLIs and 84 targets.

Procurement

Assessment of the State's Capacity to Implement Procurement

36. In November 2013, the Bank carried out a Procurement Capacity Assessment in the Project's implementing agencies, including the DL. The overall Project risk for procurement is Substantial due to (a) the need to establish the DL's special bidding committees and develop their knowledge on Bank's guidelines; (b) the need to develop the necessary abilities to write terms of reference and prepare cost estimates in each implementing agency; (c) low capacity of local procurement staff; (d) lack of incentives for retaining procurement staff; (e) lack of expertise on contract management; (f) lack of experience in Bank-financed Project implementation; (g) lack of safe conditions for procurement filing; (h) low capacity for preparing procurement plans; (i) lack of standard bidding documents acceptable to the Bank; (j) lack of systems for monitoring bidding steps and contract execution; and (k) lack of social oversight systems.

37. The assessment verified that the DL is overwhelmed by the responsibility of conducting all procurement for the state and risks not being able to handle procurement through Bank's guidelines. The creation of at least two special bidding committees will mitigate this risk. The DL also lacks a system to manage and integrate all procurement data, ranging from procurement requests to contract administration. This will be mitigated through the design of a new procurement management system with support from TA through Subcomponent 2.1. With appropriate mitigation measures in place, the DL is considered capable of processing the upcoming Project's demand of National Competitive Bidding (NCB) processes but should be expected to perform at a moderate pace.

38. SEPLAN, SEFAZ, SEDUC, SESAPI, SEMAR, INTERPI, and SDR were assessed to determine their capacity to produce quality technical specifications and terms of reference and carry out simple procurement processes. Capacity varies from good to inadequate and contracting of individual consultants to prepare bidding documents and handling noncomplex processes is advisable for some. The DL's special bidding committees will contribute to quality control of bidding documents and will facilitate processes. The Bank will provide training to all implementing agencies on writing technical specifications and terms of reference and preparing cost estimates. Procurement procedures and standard bidding documents to be used for each procurement method will be an integral part of the POM.

Table 3.6. Procurement Action Plan

Action	Timeframe
<i>(a) measures completed during preparation</i>	
1 Preparation of the Procurement Plan	Before negotiations
2 Preparation of the POM	Before negotiations
<i>(b) measures to be carried out during/throughout Project implementation</i>	
3 Establishment of at least two (2) SEAD's Special Bidding Committees	First month of the Project implementation
4 Training Implementing agencies staff on Bank's	First month of the

procurement guidelines	Project implementation
5 Training of SEAD's special bidding committees	First month of the Project implementation

Frequency of Procurement Supervision

39. In addition to the Bank's prior review of procurement activities, the capacity assessment of the implementing agencies suggests the need for yearly supervision missions to carry out post-review of procurement actions. A yearly external procurement audit satisfactory to the Bank will be required to assess and verify a sample of processes procured under Component 2. As a result of the post-reviews, independent procurement reviews, and external procurement audits, the Bank will be able to identify noncompliance and apply the remedies provided for in the Loan Agreement.

40. The GoPi has two institutions in charge of carrying out procurement oversight, the TCE-PI and CGE-PI. These institutions play an important role in assuring the transparency of procurement practices and combating fraud and corruption. The TCE-PI is staffed with personnel who are well-trained on national procurement regulations and employs acceptable auditing's tools/systems. Thus it is considered acceptable to perform procurement audits under Component 1. Subject to the previous Bank's assessment, during Project implementation, the TCE-PI will also be recommended to perform audits under Component 2.

Procurement Plan

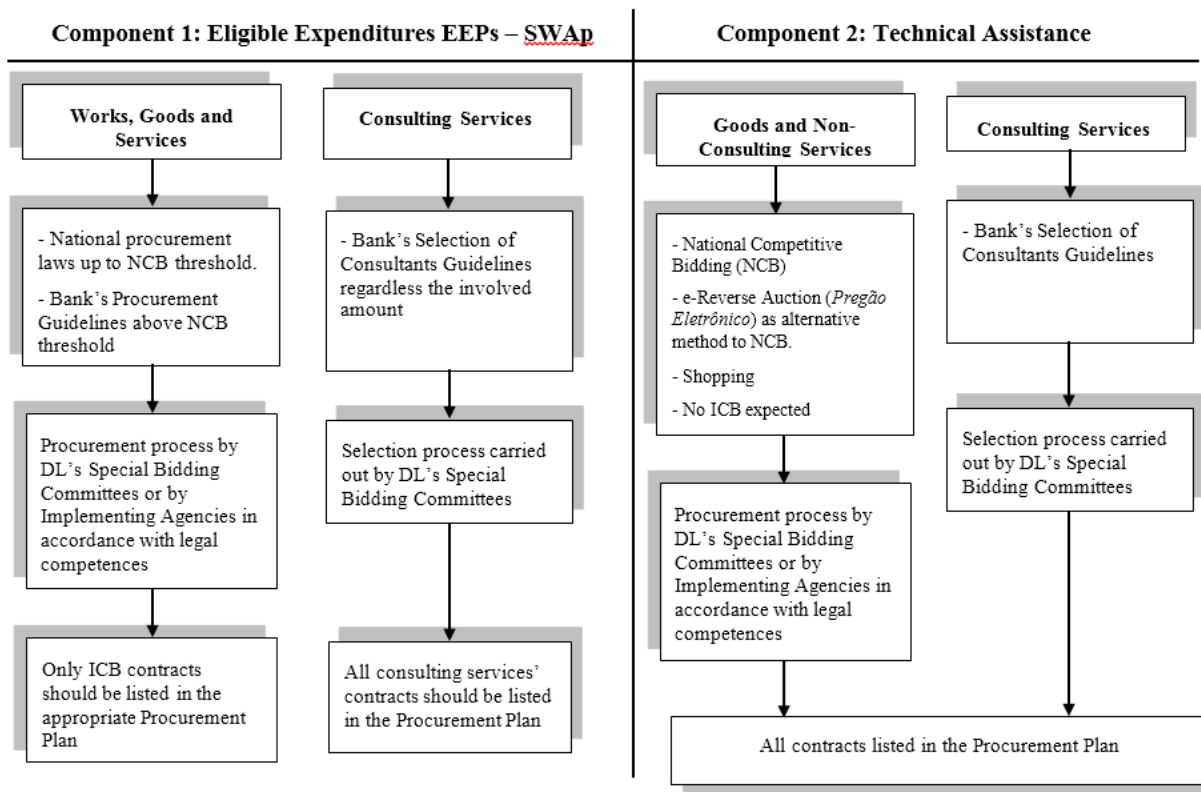
41. SEPLAN consolidated the procurement needs from all implementing agencies into one Project procurement plan. This procurement plan for the first 18 months of Project implementation provides the basis for procurement. The Bank approved this procurement plan before the loan negotiations. The plan will be available in the Project's database and in the Bank's external website. The procurement plan will be updated at least annually or as required to reflect the actual Project implementation needs and improvements in institutional capacity.

Guidelines and Procurement Arrangements

42. Procurement for the proposed Project will be carried out in accordance with the Bank's 'Guidelines: Procurement of Goods, Works, and Non-consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers', dated January 2011 and revised in July 2014; 'Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers', dated January 2011 and revised in July 2014; and the provisions stipulated in the Legal Agreement. The various items under different expenditure categories are described in general below. For each contract financed under the Project, the different procurement methods or consultant selection methods, estimated costs, prior review requirements, and time frame are agreed between the borrower and the Bank in the procurement plan.

43. Implementation will be carried out by each state secretariat and associated agency. In accordance with state law, the DL will centralize procurement arrangements of medical equipment, telecommunication and Internet services, official vehicles, pharmaceuticals, air tickets, outsourcing services, and selection of consultants.

Figure 3.2. Procurement Arrangements by Component



44. **Component 1: Eligible Expenditures.** Procurement under this component applies national procurement methods and does not require a procurement plan. However, any procurement estimated above the NCB threshold of US\$5,000,000 for goods and non-consulting services or US\$25,000,000 for works must be conducted through ICB. The DL’s special bidding committees will be responsible for conducting ICB or QCBS processes. These should be listed in the procurement plan. Any consulting services under this Component should be selected through ‘Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers’, dated January 2011 and revised in July 2014. All ICB contracts and any consulting services contracts under Component 1 should be listed in the appropriate procurement plan. All contracts under Component 1 should contain Bank’s anti-corruption provisions regardless procurement rules applied in the respective procurement process.

45. **Component 2: TA.** Procurement under this component applies Bank procurement methods. For off-the-shelf goods and readily available non-consulting services up to the NCB threshold of US\$5,000,000, the e-reverse auction method, known as “*pregão eletrônico*”, may be applied through COMPRASNET or any other e-procurement system approved by the Bank. All e-reverse auctions under Component 2 will follow procedures provided by national law if they

are previously considered acceptable by the Bank and the Borrower should apply standard bidding documents for e-reverse auction acceptable by the Bank. Implementing agencies or DL's special bidding committees will conduct e-reverse auctions, as stipulated by state law. DL's special bidding committee will conduct all consultant selection processes. All procurement under component 2 must be listed in the Project procurement plan.

46. Each implementing agency will be responsible for preparing technical specifications and terms of reference to initiate each procurement or selection process. The teams that prepare the specifications and terms of reference will join the special bidding committees and evaluation team. The establishment of DL's special bidding committees is a condition for effectiveness.

47. **Procurement of works.** Procurement of works such as the construction and renovation of the five SCCDs is only under Component 1. The respective implementing agency's bidding committee will conduct procurement. All contracts estimated to cost more than US\$25,000,000 will be subject to prior review by the Bank.

48. **Procurement of goods.** Procurement of goods is expected under both components of the Project and will include information technology equipment, medical equipment, and so forth. Procurement methods defined by national procurement laws will govern procurement under Component 1. All bidding documents and resulting contracts are required to include the Bank's clause on preventing and combating fraud and corruption to be eligible for financing. Under Component 2, procurement of goods can be processed through Shopping, NCB, ICB or *pregão eletrônico* through e-procurement system in accordance with Brazilian law and approved by the Bank. Each contract or package of contracts under Component 2 estimated to cost more than US\$1,500,000 and the first contract to be procured through NCB, Shopping, or an e-reverse auction will be subject to prior review by the Bank, regardless of the estimated cost. All ICB contracts under either component will be subject to prior review by the Bank. All direct contracting under Component 2 estimated to cost more than US\$50,000 will be subject to prior review by the Bank.

49. **Procurement of non-consulting services.** Procurement of non-consulting services is expected under both components of the Project and will include training logistics (hotel services, catering, travel services, printing services); workshops; seminars; events; and so forth. Under Component 2, these services may be processed through Shopping, NCB, ICB or *pregão eletrônico* through e-procurement system approved by the Bank. Under Component 1, procurement methods defined by national procurement laws will govern procurement only up to the NCB threshold. All bidding documents and resulting contracts are required to include the Bank's clause on preventing and combating fraud and corruption to be eligible for financing. Each contract or package of contracts under Component 2 estimated to cost more than US\$1,500,000 and the first contract to be procured through NCB, Shopping, or an e-reverse auction will be subject to prior review by the Bank, regardless of the estimated cost. All ICB contracts under either component will be subject to prior review by the Bank. All direct contracting under Component 2 estimated to cost more than US\$50,000 will be subject to prior review by the Bank.

50. **Selection of consultants.** Selection of consultants is expected under both components of the Project and will include studies, diagnostics, and so forth. Under Component 1, consulting

services will include those related to the regular operation of state agencies. Selection will follow national procurement laws for amounts estimated below US\$250,000, but all requests for proposals and resulting contracts are required to include the Bank’s clause on preventing and combating fraud and corruption to be eligible for financing. Any selection in excess of US\$500,000 under Component 1 should be processed through QCBS. Under Component 2, these services will be selected through QCBS, Selection Based on the Consultants’ Qualifications (CQS), Least-Cost Selection (LCS), Selection under a Fixed Budget (FBS), Single-Source Selection (with Bank’s no objection on a case-by-case basis), and Individual Consultants. Short lists of consultants for services estimated to cost less than US\$1,500,000 per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. All contracts under both components that are, estimated to cost more than US\$500,000 per contract will be subject to prior review by the Bank. Under Component 2, the first contract of consulting services selected through any of the abovementioned methods will be subject to prior review by the Bank, regardless of the estimated cost and each Individual Consultant contract estimated to cost more than US\$100,000 will also be subject to prior review. Direct contracting of consulting firms estimated to cost more than US\$100,000 will be subject to prior review.

51. Prior review and procurement method thresholds are summarized in table 3.8.

Table 3.7. Prior Review and Procurement Method Thresholds

Expenditure Category	Contract Value Threshold (US\$, thousands)	Procurement Method	Processes Subject to Prior Review
Works	≥25,000	ICB	All processes under both components
	≥200 and <25,000	NCB	Under Component 1: First Process Under Component 2: First process and all those above US\$1,500,000
	<200	Shopping	Under Component 1: None Under Component 2: First process
Goods	≥5,000	ICB	All processes under both components
	≥100 and <5,000	NCB	Under Component 1: First Process Under Component 2: First process and all those above US\$1,500,000
	<100	Shopping	Under Component 1: None Under Component 2: First process
Non-consulting services	≥5,000	ICB	All processes under both components
	≥100 and <5,000	NCB	Under Component 1: First Process Under Component 2: First process and all those above US\$1,500,000
	<100	Shopping	Under Component 1: None Under Component 2: First process
Consulting (firms)	≥200	QCBS/QBS/ LCS/FBS	First process regardless of the amount involved for each selection method and all processes above US\$500,000
	≥100 and <200	FBS/LCS	
	<100	CQS	
Individual consultants	–	Section V in the Consultant Guidelines	First process regardless of the amount involved and all contracts estimated to cost more than US\$100,000
Direct contracting	–	–	First process regardless of the amount involved and

of goods or non-consulting services			all contracts estimated to cost more than US\$50,000
Single Source Selection (firms)	–	–	First process regardless of the amount involved and all contracts estimated to cost more than US\$100,000

Note: QBS = Quality-based Selection.

Details of the Procurement Arrangements Involving International Competition

52. Goods, works, and non-consulting services

- (a) List of contract packages to be procured following ICB and direct contracting: There are no expectation for ICB contracts.

Table 3.8. Contract Packages

Description of Assignment	Estimated Cost (thousands)	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date
		ICB	Prior	

- (b) ICB contracts for goods and non-consulting services estimated to cost above US\$5,000,000 per contract and all direct contracting will be subject to prior review by the Bank.
- (c) ICB contracts for works estimated to cost above US\$25,000,000 per contract and all direct contracting will be subject to prior review by the Bank.

53. Consulting services

- (a) List of consulting assignments with a short list of international firms.

Table 3.9. Consulting Assignments

Description of Assignment	Estimated Cost (thousands)	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date
Training and supervised operation on the CGEO System	2,000	QCBS	Prior	05/03/2017

- (b) Consultancy services (firms) estimated to cost above US\$500,000 and single-source selection of consultants estimated to cost more than US\$100,000 will be subject to prior review by the Bank.
- (a) Short lists of consultants for services estimated to cost less than US\$1,500,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Environmental and Social (including safeguards)⁸²

Environmental

54. The Project comprises activities related to education, health, WRM, land titling, rural poverty alleviation, and institutional strengthening of state public administration. It does not include any activity with the potential to generate significant negative environmental impacts. The ESMF concluded that only the following subcomponents might generate environmental impacts: Subcomponents 1.2, Expanding Access to Health Care for Patients with Chronic Diseases; 1.4, Strengthening Real Property Rights; and 1.5, Strengthening Participation of Poor Women and *Quilombola* Communities in Rural Productive Chains. However, the potential environmental impacts of these subcomponents are mostly limited in scope, localized, and temporary. The following environmental safeguard policies have been triggered: OP/BP 4.01 Environmental Assessment, OP/BP 4.04 Natural Habitats, OP/BP 4.36 Forests, OP/BP 4.09 Pest Management, and OP/BP 4.11 Physical Cultural Resources.

55. The Environmental Assessment OP/BP 4.01 was triggered to assess all potential impacts, and the GoPi prepared an ESMF, including a social impact assessment, a simplified pest management plan, and a RPF. The ESMF's scope was defined with the Bank safeguards specialists' support and includes mitigation measures to avoid potential social conflict that can result from Project activities.

56. The ESMF comprises an analysis of economic or social impact that the Project activities might have on vulnerable groups, traditional communities, or poor rural communities. The ESMF uses checklists for screening investment proposals and negative lists for excluding activities with significant negative impacts or activities affecting known archeological sites. Additionally, the ESMF has procedures for screening any known cultural property in the Project area and incorporates 'chance find' procedures in the event that culturally significant resources are discovered during Project implementation. The ESMF also includes environmental guidance for the health clinics construction works,

57. Additionally, the client prepared a HWMP for the health clinics, addressing health waste handling and disposal, in accordance with the Brazilian sanitary and environmental regulations and elaborated a specific EMP for PROGERE II, which coordinates the activities related to strengthening rural productive chains. The environmental assessment instrument was properly disclosed and consulted.

58. Environmental impacts associated with expanding access to health care for patients with chronic diseases are restricted to the implementation of five small clinics. The clinics will be implemented in urban areas, with minimum or negligible marginal impacts due to construction or refurbishing of existing buildings.

59. The original ESMF was publicly consulted before disclosure on SEPLAN's website on June 13, 2014, and was published on the Bank's external website on June 19, 2014. The ESMF

⁸² The Borrower publicly disclosed the ESMF and RPF on its website:
<http://www.seplan.pi.gov.br/arquivos/salvuardas.pdf>

was updated a first time in August 2015 to include provisions related to two additional productive chains to be supported by PROGERE II. The updated report was disclosed for consultation and submitted to SEPLAN and the Bank's external website in October 2015. It was further reviewed and disclosed again on SEPLAN and the Bank's external website on November 3, 2015.

60. The OP/BP 4.04 – Natural Habitats was triggered as the Project encompasses a land regularization program to define land regularization criteria and management procedures to avoid potential impacts on sensitive biodiversity areas and protected areas. The ESMF adopted specific procedures for the land regularization program, looking to improve the preservation of natural corridors, fragile ecosystems and areas with relevant biodiversity. The designed land regularization program will promote the preservation of the permanent protection areas and legal reserves, as the restoration of degraded areas in private properties. It is important to note that land titles are key for deforestation control, allowing the demarcation of legal reserves and permanent protection areas within private land, thus enabling the identification of the persons accountable for illegal deforestation activities. Additionally, the EMP of PROGERE II has specific guidelines, looking to mitigate negative impacts on natural habitats. Overall, the Project may generate positive impacts on natural habitats and protected areas. The Project does not envisage potential negative impacts on physical cultural resources; however, the OP/BP 4.11 Physical Cultural Resources is triggered on a precautionary basis as the Project area contains important archeological sites, notably the *Serra da Capivara* National Park and the *Serra da Confusão* National Park.

61. The OP/BP 4.36 – Forests was triggered on a precautionary basis, considering the potential induced impacts of the land regularization activities. The Project does not support any activity that may cause negative impacts on the health and quality of forests. The Project will contribute to the conservation and restoration of the *Cerrado* and *Caatinga* biomes, avoiding deforestation of natural vegetation in parts of private rural holdings (all land on steep slopes, along watercourses (up to a given distance from the margin) or in the vicinity of springs, protecting environmental services and values of natural vegetation. The ESMF considers the requirements of the OP/BP 4.36 whenever restoration and plantation activities are being planned.

62. Eligible activities for the Strengthening Participation of Poor Women and *Quilombola* Communities in Rural Productive Chains subcomponent are limited to cashew plantation, bee keeping, goat raising, small handicraft production, manioc farming and manioc flour production, and backyard horticulture, all in small-scale operations and adopting environmentally sustainable practices with minimum environmental impacts. The State of Piauí has some experience with Bank safeguards and has at its disposal state environmental agencies to analyze, monitor, and supervise environmental safeguards. The team assessed the client's institutional capacity to implement the safeguard policies, concluding that adequate institutional arrangements and TA are necessary. The Project involves several state secretariats and agencies, but three entities, SEMAR, INTERPI, and the SDR, will be in charge of the ESMF implementation, without the need for complex institutional provisions. The SDR has experience with rural poverty Projects funded by the Bank and does not need major adjustments to comply with the safeguard policies. Despite that experience, the ESMF recommended hiring two environmental experts to support the existing staff.

63. During Project preparation, the GoPi issued a decree integrating INTERPI and SEMAR processes related to land titling environmental assessment, the rural environmental cadastre application, and rural activity licensing and registering. The GoPi also established the CGEO with the goal of offering high-quality cartographic, environmental, and land use information, to support the environmental licensing and LTRPs. The TA component will support the client on staff training and the purchase of equipment, software and satellite images, for the center's effective implementation.

Social

64. The Bank has carried out an assessment of the potential social impacts of the activities supported by the Project. Overall, the Project is expected to have a positive social impact and pro-poor effects, particularly in the state's semiarid rural areas where the high levels of poverty and extreme poverty of the state are exacerbated and closely related with subsistence family farms. In semiarid rural areas, poverty is closely related to family farms, which rely on small-scale and rain-fed agriculture characterized by rudimentary techniques (such as slash-and-burn agriculture) and incipient access to markets, credit and financing lines, TA, and technologies.⁸³

65. Activities to be supported in the education and health sectors are targeted to ensure that the primary beneficiaries are the poor. Given the strong association between low educational attainment and poverty in Brazil, activities focused on the improvement of the public education system in municipalities with high poverty levels might have a pro-poor impact. Positive social impacts are also expected from activities envisaged on the health sector as they will enhance the treatment of chronic diseases that are closely associated with poverty.

66. Poverty in semiarid rural areas is also associated with cyclical droughts and prolonged water scarcity. Conflicts over water use have recently increased. Therefore, registration and future allocation of water resources may also have pro-poor effects. They may reduce inefficient water use by large rural producers, water shortages among subsistence and small producers, conflicts over water use, and the vulnerability of the poor to extreme climate events (such as cyclical droughts in the semiarid region), leading to increases in their productivity and incomes. Key stakeholders have pointed out the need to initiate activities of water user registration and better allocation of natural resources, with outreach through information and awareness raising campaigns engaging multiple stakeholders.

67. Land concentration and land tenure insecurity critically contribute to rural poverty in Piauí.⁸⁴ Land tenure regularization might increase land tenure security for small landholders, traditional communities, and poor and socially vulnerable rural populations as well as reduce land disputes due to the superimposition of claims and fraudulent land titles.⁸⁵ Land tenure regularization may have a strong impact on access to credit and financing lines for poor rural

⁸³ Family farms comprise 90 percent of the rural landholdings in the state but hold just 40 percent of the agricultural areas. Small-scale agriculture usually takes place in non-titled land and relies on outdated techniques.

⁸⁴ Land distribution in Piauí is highly unequal, with the land Gini coefficient in excess of 0.85 and increasing. The average area of family farm landholdings is 17 ha, whereas the average area of non-family farm landholdings is 233 ha. Of the landholdings in the state, 61 percent are smaller than 10 ha and comprise only 3 percent of the total agricultural land. Meanwhile, 0.5 percent of the landholdings are more than 1,000 ha and hold 35 percent of the total agricultural land.

⁸⁵ In 2006, only 53 percent of the family farmers and 62 percent of the non-family farmers held secure land titles.

families. Positive impacts of land tenure regularization are especially expected for poor communities living on public land (including *Quilombola* settlements) as their livelihoods are heavily reliant on the lands that they are at risk of losing if their occupation is not regularized.⁸⁶

68. Sustainable productive inclusion practices associated with priority productive chains—selected based on criteria of economic viability—might also contribute to strengthen family farming and expand the market opportunities for their products by overcoming barriers to accessing TA and introducing new technologies. The envisaged activities might lead to productivity increases in key production chains, efficient allocation of natural resources, and income generation. Therefore, they may contribute for reducing poverty and increasing the adaptive capacity of poor small farms to deal with climate variability and extreme climate events.

69. Potential distributional impacts may also contribute to promote gender equity and gender sensitive indicators will be monitored to assess Project results and impacts. The envisaged outcomes of land tenure regularization and productive inclusion activities on family farming may contribute to gender equity. Women represent 31 percent of the labor force in family farming and 14 percent of family landholders. A key principle of the LTRP is that land titles must be issued either solely for the female heads of household or jointly in women's names. Women's groups and organizations will be a priority target of activities envisaged to revamp prioritized production chains, which already intensively engage women groups. This focus on women producers may contribute to enhance recognition of women's economic roles and to reduce occupational segregation. Activities in the education sector might contribute to retain young people (male and female) in secondary schools and to improve their skills and qualification for accessing the formal job market. In rural areas, young males tend to drop out of school earlier than young females to take on responsibilities in family production. Monetary incentives to remain in school may contribute to reduce the gender gap in secondary schools. Furthermore, the Project will support the preparation of a PEPM, contributing to enhance women's voice and participation in decision making and to mainstream gender-smart policies in key sectors (productive inclusion and economic empowerment, human capital formation, women's rights, and combatting gender-based violence) as well as to guarantee the rights of women.

70. The Project will not rely on a stand-alone grievance redress mechanism. On the contrary, it will rely on existing institutional arrangements for receiving, registering, and answering grievances as well as for fostering citizen engagement through the OGE and its network of technical supporting units in each key state secretariat and agency involved in Project implementation. The Project will support the strengthening and integration of these arrangements by developing streamlined and standardized procedures, revamping the system for receiving and handling complaints, training staff in charge of operating this system in each implementing secretariat and agency, and launching a communications campaign aimed at increasing citizen awareness and credibility of the ombudsman's system. The reliance on and the strengthening of

⁸⁶ *Quilombola* communities are the most vulnerable group among the rural poor. It is estimated that there may be nearly 200 traditional Afro-descendant communities in the state (including certified *Quilombola* communities and those not certified by *Fundação Palmares*). They may comprise more than 10,000 families, who traditionally occupy an area of approximately 670,000 ha. Nevertheless, the overlap with other land categories is not clear and there are just five regularized *Quilombola* communities, occupying an area of 21,215 ha (0.1 percent of the state territory).

the state systems simultaneously avoids the inefficient proliferation of institutional structures and allows the Project to contribute to strengthening and enhancing the internal capacity already in place. Activities supporting the strengthening of the state ombudsman's system are expected to yield positive outcomes related to increased transparency and accountability in the provision of public services, which are expected to improve the quality of these services.

71. The OP/BP 4.10 - Indigenous Peoples is not triggered for this Project. There are no indigenous peoples in the Project area. Although three social groups currently request recognition of their indigenous identity, they do not fulfill the four criteria set by the OP 4.10 to identify indigenous peoples.⁸⁷ Although these three groups face high degrees of vulnerability, they do not differ from other poor rural communities in the state in accessing public programs and do not require distinct treatment for the purpose of social inclusion.

72. The OP/BP 4.12 – Involuntary Resettlement is triggered in a precautionary manner because activities supported under Subcomponent 1.4, particularly those associated with tenure regularization of *Quilombola* lands, may lead to adverse impacts related to the involuntary resettlement of residents who do not identify themselves as *Quilombolas*. Although these situations are expected to be minor and no specific Project activities are expected to be defined before appraisal, the client has prepared a RPF aligned with the relevant state and federal legislation and the OP 4.12. The RPF defines the criteria for addressing potential adverse impacts related to land acquisition leading to physical and/or economic displacement as well as for ensuring and documenting voluntary land donations that may be required by activities under Subcomponent 1.5.⁸⁸

73. The land required for implementing and making operational the five SCCDs under Subcomponent 1.2 have been previously identified and assessed with regards to land tenure rights, concluding that they are state-owned and free of occupants. The ESMF/RPF contains the list of areas selected for building these health facilities, their location, and land tenure status. The OP 4.12 does not apply to activities such as those proposed under Subcomponent 1.3, because it “does not apply to regulations of natural resources on a national or regional level to promote their sustainability, such as watershed management, groundwater management, fisheries management.”⁸⁹ This exemption holds, for example, when the program imposes restrictions on the use of natural resources, such as limitations on pumping water from aquifers.

74. Preliminary consultations were held with key stakeholders during the joint preparation of this Project and the linked DPL operation. These consultations addressed the assessed social and environmental impacts of the policies and activities supported by the operations and included workshops and public hearings, held in the capital Teresina, in the *Cerrado*, and the semiarid

⁸⁷ Despite self-identification as members of a distinct cultural group, (a) they have not been recognized by others as indigenous peoples; (b) they hold no collective attachment to geographically distinct habitats or ancestral territories in the Project area or to the natural resources in these habitats and territories; (c) they do not hold customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and (d) they do not keep an indigenous language different from the official language of the country or region.

⁸⁸ In the case of voluntary land donation, evidence will have to be provided demonstrating that the supported activities could be implemented in another location. The donors are aware they are not obligated to donate land and freely agree to donate it to the community benefitting from the subproject without compensation.

⁸⁹ World Bank. 2004. “Involuntary Resettlement Sourcebook: Planning and Implementation in Development Projects.” Washington, D.C.: (20).

macro-region. Small farmers, *Quilombola* communities and representative organizations, rural labor unions, health users, and other key stakeholders expressed broad support for the envisaged activities in both operations, whose pro-poor impacts were highlighted throughout the consultation process.

75. A special public hearing session was held on June 24, 2014, in Teresina to present the ESMF and RPF prepared by the GoPi. SEPLAN was in charge of organizing the public hearing and invited representatives from diverse state and federal agencies, civil society, nongovernmental organizations, Piauí courts, universities, and health workers' associations, among other entities related to the Project. SEPLAN also advertised the public hearing on its website, making available the ESMF executive summary and the draft ESMF. The consultation process continued after the public hearing and SEPLAN maintained the ESMF consultation link on its website through July 15, 2014, disclosing the ESMF document and receiving comments by email. The RPF was also disclosed as a stand-alone instrument on SEPLAN's website. Inputs provided through the website and in person were incorporated in the ESMF and the RPF as appropriate. The consultation invitation, public hearing invitation and attendance list, and the ESMF summary presented in the hearing are included in the ESMF's appendix. The final RPF report has been submitted to the Bank on October 22, 2015 and disclosed on SEPLAN's and the Bank's external website on October 23, 2015.

Monitoring and Evaluation

72. SEPLAN will be primarily responsible for tracking the progress related to the Project outcomes and results. Each state secretariat and its associated agencies will monitor progress in its respective sector. Project reports will be prepared and presented to the Bank twice a year and will indicate the progress made under the different components of the Project and measure the performance against the indicators established in the RF. In addition, the Project reports will include the following: (a) performance of the EEPs over the period covered by the report (main accomplishments under the EEPs and financial execution); (b) performance of the TA component; (c) a section describing potential developments that can affect Project implementation, which can consist of a review of the main risks and the impact of mitigation measures suggested as well as reports on any safeguard issues that have arisen during implementation; and (d) compliance with safeguard policies and the Environmental Management Framework. An MTR will be carried out after 24 months of effectiveness to assess Project implementation progress and to make adjustments if needed. An IVE will be recruited to carry out two technical audits of the DLIs' achievements.

Annex 4: Economic and Financial Analysis

1. A comprehensive economic evaluation was carried out to assess whether the interventions will affect positively the development of the state of Piauí. The evaluation was conducted for education and health programs, which represent 78 percent of the investment; nevertheless the cost of TA was included as part of the evaluation given its importance for a successful implementation and achievement of the Project outcomes.

Methodology

2. For education and health, a cost-benefit analysis was carried out and complemented by sensitivity and risk analyses. The cost-benefit analysis calculates the net benefits generated by each subcomponent on an incremental basis. The benefits of each intervention equal the difference between the incremental benefits and the incremental costs of two scenarios: with and without the Project. The with-Project scenario considers actual achievements obtained with the interventions. The without-Project scenario corresponds to business as usual. The activities were appraised measuring their flow of costs and benefits for the lifetime of the Project.

3. The cost-benefit approach compares the costs of the interventions against estimated economic benefits. The two main results of the analysis are the internal rate of return (IRR) and the net present value (NPV). Both figures capture the estimated economic returns of the Project, rather than the financial returns used in traditional cash flow analysis. The primary source of information was the GoPi provided by the secretariats responsible for each intervention.

Components of the Project and Associated Costs

4. The evaluation was carried out for selected programs in the education sector and health interventions. The cost of component 2, which consists of TA, was included in the evaluation, as its implementation is crucial to attain expected benefits.

Subcomponent 1.1: Improving retention in public secondary education

5. This subcomponent includes programs aimed at improving access to education and reducing dropout rates in public SE through the YSP, expanding FTS in SE, expanding STE and distance learning for general SE.⁹⁰ A sample of subprojects were selected for this evaluation based on the activities identified by SEDUC with a cost of R\$687 million. All other interventions under this subcomponent will bring additional benefits which were not measured at this point as no information was available. The State Student Assessment intervention was not evaluated per se, however its costs were included in the evaluation.

6. SE in Piauí presents lower enrollment rates and higher dropout rates than at the national level. Dropout rates are higher in the first year and decrease gradually in the later years. The Project aims to lower the dropout rate from the current level of 16 percent closer to the national level of 14 percent.

⁹⁰ The activities supporting the reestablishment of the standardized state student assessment were not considered to contribute significantly to economic returns, thus were not included in the analysis.

Table 4.1. Comparison of SE Indicators at State and National Levels

	PIAUÍ	BRAZIL
Enrollment in SE		52.0%
Urban	41.6%	
Rural areas	38.1%	
Public Schools	85.0%	
Dropout rates:		
First Year	19.9%	13.1%
Second Year	15.0%	
Third Year	11.5%	
Average	16.0%	
Over-age students in SE	50.0%	32.0%

Source: SEDUC

7. Students drop out of school to find a job and due to the lack of incentives and the perceived low quality of courses offered. The students who drop out are out of school and some out of work. The programs aim to keep students at school until they acquire the skills they need for stable and remunerative work, which means remaining in school at least through the end of secondary school. Different interventions are proposed to prevent secondary school dropouts: demand-side measures such as conditional cash transfers; provision of information on the return to education; and supply-side interventions to strengthen quality of education, improve school management, extend the school day, and introduce compulsory schooling.

Table 4.2. Reasons for Not Attending School in SE

Insufficient capacity at schools	8.6%
To go to the labor market	27.1%
No incentive to remain at school	40.3%
Lower quality of course	10.9%
Other	13.1%

Source: Neri (2010)

8. **Expanding the YSP for SE students.** The first intervention consists of expanding monetary incentives for students who stay in school. The program establishes that students who successfully pass their first year of SE will receive an annual payment of R\$400; R\$500 for the second year; and R\$600 for the third year. If SE is successfully completed, the student would receive a total of R\$1,500.

9. The total program costs about R\$35 million and the number of students expected to benefit from the program is as follows:

Table 4.3. Students Expected to Benefit from YSP

Year Students Enrolled in	# Number of Students
2015	8,900
2016	8,900
2017	10,000
2018	11,800
2019	12,700

Source: SEDUC

10. **Expanding FTS in SE.** Full-time education allows extended instructional time for students, who gain from a more diverse and enriched curriculum, including additional lessons, more laboratory hours, and extracurricular activities. Full-time education requires that teachers be exclusively dedicated to a particular school, as opposed to teachers who divide their time between multiple schools. The students will be at school nine hours per day during weekdays, which brings additional benefits related to keeping them active in schools instead of being unoccupied on the streets.

11. Currently the State of Piauí has almost 12,000 full-time students enrolled in 33 schools in 24 municipalities. The intervention will (a) improve school facilities in selected schools to provide full-time SE; (b) provide initial and in-service training to teachers, principals, and pedagogical coordinators; (c) provide pedagogical material and equipment; and (d) finance other operating costs.

12. The Project aims to double the capacity of FTS by the end of the implementation period, with the following targets.

Table 4.4. Additional Students Enrolled in FTS

Year	Incremental Students	Total Students
2015		11,957
2016	2,400	14,357
2017	6,400	18,357
2018	10,400	22,357
2019	12,000	23,957

Source: SEDUC

13. The intervention aims to replicate benefits already attained at existing full-time schools, among them: (i) holistic education, including not only required academic courses, but also, arts, sports, languages, etc.; (ii) improved academic performance, with an increasing number of students participating in national competitions in subjects such as math, physics, languages, etc.; (iii) students are motivated to pursue higher education; and (iv) improved quality of life for students and their families.

14. SEDUC conducted a survey among a group of full-time students who pursued higher education and found that interest in college degrees has increased in all subjects especially humanities, languages, and health.

Table 4.5. Students Choice of Specialization in Higher Education

Areas of Specialization	2009	2010	2011	2012	2013	2014	TOTAL
Agriculture	-	-	1	1	2	-	4
Education	1	2	4	2	3	3	15
Humanities and Languages	1	3	4	12	8	20	48
Environment	5	1	2	4	8	10	30
Health	-	1	2	11	15	10	39
Technology	-	2	1	5	2	7	17
TOTAL	7	9	14	35	38	50	153

15. **Expanding STE.** This program consists of four interventions: (a) increasing capacity of schools by building new facilities and increasing number of shifts; (b) increasing distance learning for technical education; (c) expanding advanced education (STE); and (d) inviting the private sector to participate in the program and promoting interaction between academic programs, students, and the private sector.

16. This program was evaluated for some of the activities to be implemented, as not all have been identified by SEDUC at this time. The investment evaluated correspond to a portion of the program cost, yet it comprises all types of activities that are proposed. It is expected that additional activities to be designed by SEDUC under this program will have similar results as those presented here.

17. The evaluated activities aim to enroll about 37,000 students by the end of the implementation period. The associated cost of these specific activities is about US\$93 million.⁹¹

Table 4.6. Additional Students Enrollment in STE

	Increase Capacity of Schools	Increase Distance Technical Education	Expand Post-secondary Education	Total Students
2015				
2016		640	6,200	6,840
2017	1,920	640	4,600	7,160
2018	5,760	1,280	4,600	11,640
2019	5,760	1,280	4,600	11,640
Total	13,440	3,840	20,000	37,280

Source: SEDUC

18. **Distance education.** A second program aims to expand distance learning to remote areas having poor access to social services. Distance learning has been implemented in Northeast Brazil. In Bahia, the program targets SE, with 17,000 enrolled students in 50 municipalities. In Amazonas, 34,000 students are enrolled in 62 municipalities. In Piauí, the program started in 2012 and currently has 15,000 students in 177 municipalities. Of the enrolled students, 47 percent are taking technical courses of advanced education; 15 percent are doing SE; and 38 percent fundamental education.

⁹¹ For distance technical education, the same cost per student as in the distance learning (second intervention under the education subcomponent) was assumed.

19. The intervention will finance broadcast equipment, improvement of electric networks, and training of local tutors. It targets SE and advanced education for adults. There will be a threefold increase in the number of facilities in the remote areas and the number of students will increase to almost four times the current levels.

Table 4.7 Students Expected to Attend Distance Education

	<i>Students</i>	<i>Remote Classrooms</i>
2015	15,200	300
2016	27,000	450
2017	36,000	600
2018	45,000	750
2019	54,000	900

Source: SEDUC

20. **Benefits of interventions in education.** All interventions aim at improving the retention rate of SE students through better quality, higher access to education and for some, through monetary incentives.

21. The benefits from the interventions will go beyond the impact on students. Studies show that individuals who graduate and have access to quality education through secondary school are more likely to find gainful employment, have stable families, and be active and productive citizens. They are also less likely to commit serious crimes and less likely to place high demands on the public health system.⁹² These benefits will have a positive impact on the fiscal balance of the Government as (a) it would receive additional income taxes from people with higher earnings; (b) better educated people are generally healthier, thereby lowering public expenditure on provision of health care; and (c) higher earnings from better education will bring about more consumption of goods and services and this gives rise to fiscal effects beyond income tax and social security contributions. These returns will partially pay off public investment in education.

22. In this evaluation, benefits were estimated only from the students' point of view and so its results were on the conservative side. Net benefits were estimated as incremental benefits from two situations, 'with' and 'without' interventions. In the 'without' intervention situation, current dropout rates remain as well as capacity of schools, so the number of students per year accepted at schools does not change. In the 'with' intervention situation, dropout rate decreases by 2 percent and, for some of the interventions, the number of students attending school increases due to the expansion of capacity. Benefits were estimated as income increase from higher wages received by students who graduated from SE. The gains were partially offset due to the income foregone while in school. Benefits were estimated based on information provided by SEDUC regarding the local labor market and associated wages. Other assumptions were based on results presented in Neri (2010),⁹³ which show that STE graduates, when compared to individuals with only SE, are 48.2 percent more likely to get a job, had a 38 percent more likely chance that the job is in the formal sector, and have a 12.9 percent higher wage. Income foregone is assumed as monthly minimum wage at R\$788⁹⁴ and unemployment of 11.1 percent.

⁹² Mitra, Dana. 2011. "The Social and Economic Benefits of Public Education." University of Pennsylvania.

⁹³ Neri, Marcelo Cortes. 2010. *Instituto Votarantim A Educacao Profissional e Voce no Mercado de Trabalho*. Maio 2010. FGV CPS Centro de Politicas Sociais.

⁹⁴ December 2014.

23. The assumptions for each type of intervention varied. For some, the benefit will result from lower dropout rates and higher wage rates in the labor market (monetary incentives and full-time education); for others (STE and distance learning), benefits resulted from higher enrollment and higher wage. In all interventions, the benefits were offset by losses due to income forgone. To calculate the income foregone, it is assumed that 11 percent of the youth who were out of school, either because they dropped out or they did not enroll, were unemployed (using the unemployment rate) and the rest had a job at minimum wage. This was a conservative assumption, as some students did not drop out because they wanted to find a job but were not interested.

24. Additional assumptions used for the evaluation are listed in table 4.8.

Table 4.8. Assumptions Used for the Evaluation of benefits

Unemployment rate	11%
Foregone income (R\$/month)	788
Wage increase on completing SE	25%
Higher possibility of getting a job	48%
Probability of getting a formal sector job	38%
Increase in wage in the formal sector	12%

Source: SEDUC and Neri (2010)

25. The number of beneficiaries per evaluated intervention ranged from about 2,000 for the monetary incentives program to almost 40,000 in SE, STE and distance learning.

Table 4.9. Beneficiaries by Intervention

Year	Expanding YSP	Expanding FTS	Expanding STE	Expanding Distance Learning
	# Students who will not drop out	New students who will enroll	New students who will enroll	New students who will enroll
2016	293	2,400	6,840	11,800
2017	424	6,400	7,160	9,000
2018	523	10,400	11,640	9,000
2019	590	10,400	11,640	9,000
<i>Total</i>	<i>1,830</i>	<i>29,600</i>	<i>37,280</i>	<i>38,800</i>

26. **Results of the education subcomponent.** Results of the interventions in the education sector show that all activities yield positive results. The average return is 15 percent and the net benefit close to R\$1,000 million. Expected benefits were about twice as much the costs. All interventions show returns higher than 13 percent and two of the programs, FTS and distance learning, got returns as high as 23 percent and 15 percent, respectively. The better results are explained by the lower cost per student than the other programs.

27. When investment cost of the Student Assessment activities is included the return is still 15 percent and the net benefits reduced by R\$11 million.

Table 4.10. Results of the Education Subcomponent

	Net Present Value of Flows (R\$ thousands)			IRR %
	Costs	Benefits	Net Benefits	
YSP	28,573	41,429	12,856	13%
FTS	256,074	644,263	388,189	23%
STE	321,059	597,311	276,252	13%
Distance Learning	99,391	391,265	291,874	15%
Total (w/o State Student Assessment)	705,098	1,674,269	969,171	15%
Total (including Student Assessment)	716,498	1,674,269	957,771	15%

28. The results are assuring given that additional benefits were not included. Such benefits include (a) the impact on the fiscal situation for the Government, generated by higher income taxes and higher value added taxes collected due to more consumption of goods and services; (b) health improvement; and (c) improvement in quality of life and social benefits.

Subcomponent 1.2: Expanding access to healthcare for patients with chronic diseases

29. Despite recent progress, the health network at the state and municipal levels does not meet the needs of the population. The predominance of illness and early death due to chronic diseases among people of low socioeconomic status can be attributed to variation in access to health services, exposure to risk factors, and low awareness about preventative behaviors, mostly in urban areas. Suitable facilities are not accessible and staffing is insufficient. Management and coordination of patient flow are poor and too many patients are transferred to or seek care in the capital, Teresina. These geographic inequalities in staffing and services produce bottlenecks, compromise the health care delivery system, and, consequently, increase mortality rates for chronic diseases. Many patients do not receive adequate medical follow-up and/or preventative procedures.

30. SESAPI has prioritized hypertension and diabetes as diseases with high impact on the death rate of its population. Of the population, 21 percent reports having received a diagnosis for hypertension and 5 percent for diabetes,⁹⁵ but only a portion of those are treated at health facilities. Some die prematurely and many are unable to work due to their illness. According to the Ministry of Health,⁹⁶ in 2014, the mortality rate in Piauí from hypertension was 34.1 per 100,000 people and from diabetes mellitus was 37.1.

31. Health intervention aims to expand access to diagnosis and treatment for patients with chronic diseases by implementing five SCCDs and focusing on examinations and consultations for patients with chronic diseases. These centers will focus on reducing morbidity and mortality related to cancer, hypertension, and diabetes and will be located in five municipalities distributed uniformly across the state, with adequate transportation accessibility.

⁹⁵ IBGE. IBGE/Diretoria de Pesquisas. Coordenação de População e Indicadores Sociais. Gerência de Estudos e Análises da Dinâmica Demográfica.

⁹⁶ Ministério Fonte: Ministério da Saúde - Sistema de Informação de Atenção Básica e Secretaria Estadual de Saúde.

32. Diabetes and hypertension are conditions associated with decline in physical functioning. A study carried out in Brazil⁹⁷ investigated changes in the strength of the association between mobility and hypertension and diabetes in a large representative sample of older Brazilian adults over a ten-year period. The data came from the Brazilian National Household Sample Surveys of 1998, 2003, and 2008. The sample comprised 28,943 participants aged 60 years and older. Results show that over the ten-year period, the prevalence of hypertension increased from 44 percent (1998) to 49 percent (2003) and then to 53 percent (2008). A similar pattern was observed for the prevalence of diabetes: 10 percent in 1998, 13 percent in 2003, and 16 percent in 2008 ($p < 0.001$). Overall, physical mobility showed a statistically significant association with both chronic diseases studied, even after adjusting for potential confounders. The study concluded that despite the increases observed in the prevalence of hypertension and diabetes over the ten-year period, the decrease in strength of the association with physical mobility during the first period can be explained by improvements in health services and treatment of older adults. Special attention should be given to the treatment and management of diabetes to avoid declines in physical mobility levels.

Table 4.11. Physical Mobility Index for Older Adults (>60 Years)

	Percent (%)
No difficulty	28.5
Moderate difficulty	35.2
Greater difficulty	36.3

Source: Nascimento et al BMC Public Health (2015) 15:591

33. The intervention is expected to increase the awareness of critical illness; expand the access for medical attention; treat the diseases appropriately; and, as a result, reduce hospitalization, deaths, and eventually the prevalence of diseases. The benefits will have an impact on the quality of life of the population and especially the elders. Preservation of the capacity to live independently and to function well during later life is important from both individual quality of life and public health perspectives. Mobility is a critical characteristic for functioning independently. Those who lose mobility have higher rates of morbidity, hospitalization, disability, institutionalization, and mortality. They also have a higher probability of developing depression and social isolation.

34. The economic evaluation was conducted to estimate the related costs of hypertension and diabetes under two situations: without and with intervention. For both scenarios the following costs were included: (a) current cost of treating these diseases in medical centers and in hospitals; (b) cost associated with lack of mobility caused by hypertension and diabetes; (c) cost of premature death associated with hypertension and diabetes. The information of costs was provided for SESAPI based on data from the Brazilian Universal Health System (*Sistema Universal de Saúde*) and from medical centers and health specialists. The value of a premature death was based on the average age of death in Piauí caused by hypertension (67 years) and by diabetes (66 years) compared to life expectancy in Brazil (75 years). The value of a year lost was estimated using the minimum wage and using a discounted rate of 3 percent.

⁹⁷ Nascimento, Clarissa de Mattos, Oliviera Mambri, Peixoto Giacomini. 2015. Diabetes, Hypertension and Mobility among Brazilian Older Adults: Findings from the Brazilian National Households Survey (1998, 2003, and 2008). *BMC Public Health* 15:591 DOI 10.1186/s12889-015-1956-2.

35. The benefits of the intervention correspond to reduction in costs of treating chronic diseases when more people are aware of them, get appropriate treatment, improve mobility in their later years, and extend their life. The targets assumed for the evaluation were based on statistical information on hypertension from the American Heart Association in the United States.

36. To establish the targets for this evaluation, statistical information on hypertension from the American Heart Association, and from the American Diabetes Association were revised and discussed with the Secretary of Health. The intervention will indeed increase awareness and improve treatment, bringing along lower prevalence; lower number of deaths; lower treatment costs; and better quality of life. Yet, how much will be achieved is not known. The evaluation was conducted on the conservative side using indicators lower than those presented in the United States (Table 4.12)

Table 4.12. With and Without Project Situation for Hypertension

	Without Intervention	United States	Assumptions for With Intervention
<u>Hypertension</u>			
Adults with hypertension	21.0%	17.3%	18%
Unaware of it	–	19%	19%
Aware of it	–	82%	82%
Controlled	–	53%	53%
Uncontrolled	–	48%	48%
Aware and treated	–	74%	74%
Aware and untreated	–	26%	26%
Number of deaths per 100,000 people	33	20	25
<u>Diabetes</u>			
Adults with diabetes	5.0%	9.3%	5.0%
Unaware of it	50.1%	28%	40%
Aware of it	49.9%	72%	60%
Number of deaths per 100,000 people	39	20	35

Source: Without intervention: Secretary of Health, Piauí; With intervention: American Heart Association; Statistical Fact Sheet 2013.

37. For the evaluation the operating cost of the new centers were included according to estimations made by SESAPI.

38. Results of the evaluation show that benefits estimated only for hypertension and diabetes are enough to cover all the costs of the intervention in the medical centers. Benefits outpaced cost by 52 percent and the return is 19 percent.

Table 4.13. Results of the Health Subcomponent

	Net Present Value of Flows (R\$ thousands)			ERR %
	Costs	Benefits	Net Benefits	
Health intervention	1,292,629	2,018,101	725,472	18%

Subcomponent 1.3: Expanding the registration of groundwater users

39. This intervention aims to expand the registration and allocation of water resources. This is important in Piauí where 90 percent of groundwater users have neither a license nor authorization for use. The uncontrolled and unregulated use of water leads to inefficient use of water resources, degradation of aquifers, reduced flow of rivers, and salinization. All of this puts the state at a heightened risk for drought, which will predominantly affect poor rural households whose farming activities are more dependent on secure access to water.

40. The registry to be created under this program represents important first steps toward solving the problem of WRM. The benefits will come at a later stage and so they were not quantified at this time.

Subcomponent 1.4: Strengthening real property rights

41. The land regularization program will support the execution of the state LTRP through (a) strengthening and modernization of INTERPI; (b) state land identification, demarcation, and registration; (c) land tenure regularization in INTERPI's land reform settlements; (d) regularization of *Quilombola* territories; (e) operationalization of the Land Tenure Regularization Center; and (f) an integrated land registration system. INTERPI is planning to regularize 99 land reform settlements inhabited by an estimated 5,983 families and covering a total area of 457,000 ha. INTERPI also intends to regularize at least three *Quilombola* communities located on state land.

42. Land distribution in Piauí is highly unequal. Poor farmers, sharecroppers, and landless workers are vertically linked to large farmers and rancheros and depend on them for protection, effective access to land, and survival during the periodical droughts.⁹⁸ In spite of the progress made in the past 10 years, land titles are still insecure, both for lack of enforcement from police and courts and because of the pure declaratory nature of the land registry (cadastre), insufficiently assisted by cogent measures and geographical information system surveys. The process of concentration of land is accelerating as large landowners move into the state to take advantage of the opportunities presented by cheap land and good and well-drained soils in the *Cerrado* area. Land grabbing on the part of large individual owners as well as agribusiness companies has been common in the past and especially associated with the expansion of cattle ranching and, more recently, of soybean production.

⁹⁸ Scandizzo, Pasquale. 2014. Poverty and Social Impact Assessment for Piauí's Sustainable Development and Social Inclusion Development Policy Program. Assessing the Effects of Alternative Policies in Piauí: An Evaluation Exercise using a Social Accounting Matrix.

43. The program aims to protect communities and small producers from infringement of their land use rights and to raise productivity through ensured security of tenure, enhanced access to credit, or enhanced transferability for commercial producers.⁹⁹ In addition, the efforts devoted to regularizing *Cerrado* lands will incentivize and facilitate the protection of ecosystem services that are threatened by large-scale soy (and other similar crops) production.

44. The intervention will generate important benefits related to productivity increase due to improved security of tenure and credit and market access for smallholders,¹⁰⁰ in addition to higher future income for communities and farmers in and adjacent to *Cerrado* areas due to the preservation of land-based ecosystem services. Yet, benefits could not be quantified due to lack of data.

Subcomponent 1.5: Strengthening participation of rural family farmers in rural productive value chains

45. The program aims to strengthen family farming and associated productive chains, continuing previous efforts of the State Government through an already existing program, PROGERE. The benefits of this program could not be quantified due to lack of information. Neither data on program costs nor evidence of impact is available. Since some level of investment and income growth will likely occur without the Project, economic returns could not be inferred without an estimate of this counterfactual. While tentative Projections of financial returns to some preselected PROGERE II sector investments are available, they vary widely—some are exceedingly high whereas others are low.¹⁰¹ Partly because of these difficulties, evidence of the impact of similar programs on investment and incomes is inadequate or non-existent.¹⁰²

Results of the Economic Analysis

46. Results of the economic analysis show that investment will have a positive impact on the development of Piau . Expected benefits will be 84 percent higher than the costs and the expected internal rate of return is 16 percent.

47. TA is an important component, as it would support the State Government for better implementation of the Project and help achieving the expected benefits. The evaluation was conducted including the costs of component 2 and results show that benefits would pay off the associated costs, and would generate net benefits of R\$1,626 million and return of 16 percent.

48. The results are reassuring of the positive impact that the proposed Project will have on the development of Piau . Estimated benefits were estimated on the conservative side and did not include all expected benefits. Not quantified benefits include: a) improvement of quality of life

⁹⁹ Given existing laws, regularization is also necessary for enhanced market access, but the purpose of the applicable law is to induce regularization and environmental protection by restricting market access for un-regularized farms.

¹⁰⁰ See Lawry et al. (2014), who show a productivity premium of 29 percent in Nicaragua and 73 percent in Peru.

¹⁰¹ The quality of the financial analyses available suggests that there may be issues with the selection of appropriate sectors and investments.

¹⁰² Although the evidence is not definitive, there is some suggestion that even if income from the funded activity increases due to a Project, total household income does not, that is, households may shift their income-generation strategies without a net overall increase in income. (See, for example, mcc.gov impact evaluation for Honduras Farmer Training and Development Activity).

that comes along with higher education and better medical attention; b) the Government will increase its fiscal position when receiving more taxes from higher incomes and higher consumption of goods.

Table 4.14. Results of the Education and Health Subcomponents

	Net Present Value of Flows (R\$, thousands)			ERR %
	Costs	Benefits	Net Benefits	
Education	716,498	1,674,269	957,771	15%
Health	1,292,629	2,018,101	725,472	18%
Total (w/o TA)	2,009,127	3,692,370	1,683,243	16%
Total (including TA)	2,066,127	3,692,370	1,626,243	16%

Sensitivity and Risk Analyses

49. Results are sensitive to the parameters used for evaluation and so sensitivity and risk analyses are important to measure the impact of changes on the selected variables. The sensitivity analysis measures the outcome if one of the variables changes while all others remain constant. The risk analysis measures the outcome when all selected variables change at the same time, each one based on a probability distribution

50. **Sensitivity analysis.** The variables selected as those conveying major risk to the Project are (a) cost investment overrun and (b) lower than expected achievements. In education, the lower outcomes were tested with (a) lower than 2 percent reduction in the dropout rate; (b) lower than expected enrollment of new students; and (c) variation of wage increase when finishing SE. In health, the economic results were tested with lower than expected attainments of lower prevalence rate and improvement of awareness of the disease; and c) health improvement from other chronic diseases other than hypertension and diabetes.

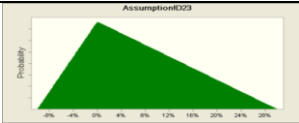
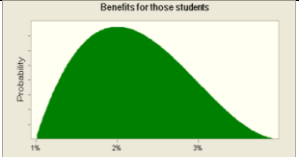
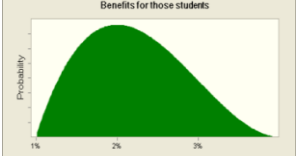
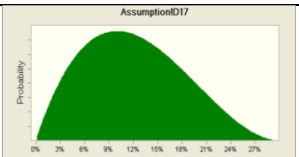
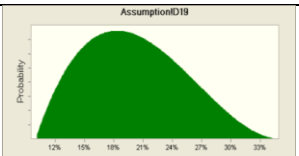
51. Results show that an investment cost overrun conveys medium risk to the economic results of the Project as increase can go up to 70 percent in education and 50 percent in health and the Project would still yield positive benefits. In the education subcomponent, the dropout rate has to decrease at least 1 percent to yield positive results, enrollment can be 30 percent lower than expected and the wage increase has to be at least 10 percent. The health intervention still generates benefits from only hypertension and diabetes with just a 1 percent reduction of prevalence.

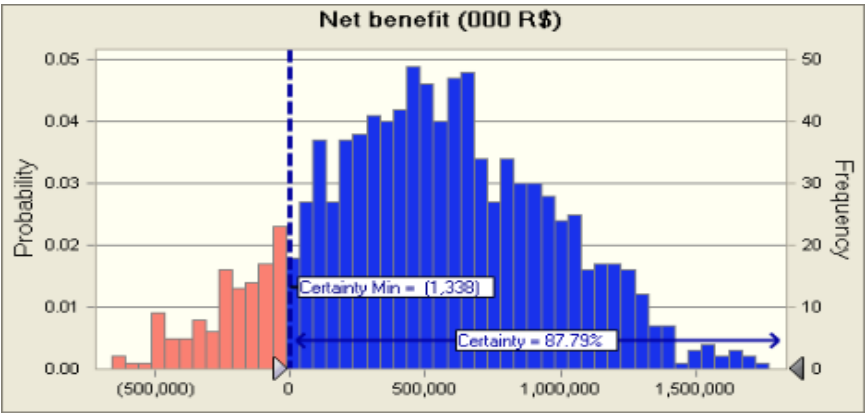
Table 4.15. Results of the Sensitivity Analysis

	Breakeven Point for Positive Results	
	Education	Health
Costs overrun	70%	50%
Dropout rate	1%	–
Reduction of enrollment	30%	–
Minimum wage increase when finishing SE	10%	–
Minimum Decrease of prevalence required	–	1%

52. **Risk analysis.** To enhance the accuracy of the financial and economic analyses, the uncertainties of the real world are approximated using the Monte Carlo simulation with the Crystal Ball software. This software measures the extent of various risks and their impact on the results of the Project by modeling a likely probability distribution that best describes the behavior of each of the selected variables. Based on a simulation of 1,000 trials, the model recalculated the results of the financial and economic analyses by simultaneously changing each of the selected risk variables according to their probability distributions.

Table 4.16. Probabilities for Each Analyzed Variable

<i>Variable</i>	<i>Distribution</i>	<i>Range</i>
<i>Investment Cost Overrun</i>		<i>Triangular Distribution with following parameters</i> Minimum: -10% Likeliest: 0% Maximum: 30%
<i>Decrease of prevalence rate</i>		<i>Beta Distribution with parameters:</i> Minimum: 1% Maximum: 4% Alpha: 2 Beta: 3
<i>Dropout rate</i>		<i>Beta Distribution with parameters:</i> Minimum: 1% Maximum: 4% Alpha: 2 Beta: 3
<i>Reduction of enrollment</i>		<i>Beta Distribution with parameters:</i> Minimum: 0% Maximum: 30% Alpha: 2 Beta: 3
<i>Wage Increase</i>		<i>Beta Distribution with parameters:</i> Minimum: 10% Maximum: 35% Alpha: 2 Beta: 3



53. The risk analysis results show the likelihood of having positive returns as 87.8 percent. The mean expected NPV resulting from this analysis is approximately R\$518 million.

Annex 5: Implementation Support Plan

Strategy and Approach for Implementation Support

1. The Implementation Support Plan for the Project is based on the following considerations: (a) the Project builds on the state's systems for program and budget execution for Component 1 activities and all EEPs are selected from the state's PPA; (b) Component 2 does not involve decentralization of funds—most activities to be supported under the TA component are to be procured by the DL—with the exception of some state secretariats and associated agencies with experience and capacity to carry out their own procurement; and (c) an FM assessment and procurement assessment have been carried out and they identified the risks, expected bottlenecks for Project implementation, mitigation measures, and necessary levels of review and supervision. The Implementation Support Plan will focus on the following areas and activities.

2. **Technical inputs.** Technical professionals and experts will provide compliance oversight by (a) verifying that activities meet eligibility conditions (technical, economic, social, and environmental); (b) reviewing the procurement plan and processes for these activities, including supporting the elaboration of terms of reference in all involved secretariats; (c) verifying the delivery of Project activities and their conformity with Bank policies (carrying out field visits to Project sites throughout implementation); and (d) accounting for payments made and following the flow of funds. The team will also support the creation and activities of the Project Management Committee to support Project implementation.

3. **General supervision inputs.** There will be two formal missions per year complemented by sector specialists' visits as needed. The team will provide continuous implementation support throughout all stages of implementation. Team members based in the country office and at headquarters will provide day-to-day supervision of all operational aspects as well as coordination with the client and among Bank team members.

4. **MTR.** An MTR will be carried out by the Bank team 24 months after effectiveness, tentatively in mid-fiscal 2018, to assess Project implementation progress and to make course corrections adjustments as needed to the Project design and DLIs.

5. **Fiduciary requirements and inputs.** The Bank will provide FM and procurement training before Project implementation. The Bank team will continue to support SEPLAN and SEFAZ to identify capacity-building needs to strengthen overall Project implementation, with an emphasis on fiduciary aspects. The team's FM specialists and the procurement specialists are based in the country office, allowing for timely support. Formal supervision of FM and procurement will be carried out semiannually or as needed. In the first year of Project implementation, efforts will be concentrated on supporting the implementing agencies through the procurement processes for activities and supervision of contracts (reviewing documents to ensure eligibility of proposed financing activities from a technical, economic, and safeguards viewpoint, reviewing terms of reference and specifications, issuing no objections to procurement

activities, and reviewing borrower evaluating reports and other Project-related documents that provide technical inputs when required).

6. **Safeguards.** Environmental and social specialists will monitor and evaluate the implementation effectiveness of the agreed Environmental Management Framework and RPF (and other documents as needed). Continuous dialogue mechanisms will be established between the safeguards specialists and the client to provide adequate support during all stages of implementation. The Bank team will conduct semiannual supervision missions, desk reviews, and field visits to follow up on Project implementation and safeguard policies compliance.

7. **Monitoring and evaluation.** Implementation support to SEPLAN will be required to ensure due diligence and technical quality of monitoring and evaluation and impact evaluation activities in Component 2. The team will coordinate with SEPLAN to collect indicator data on a semiannual basis to monitor progress and evaluate course corrections and adjustments that may be necessary to achieve Project objectives.

8. The main inputs and focus in terms of support to implementation are summarized below.

Table 5.1. Skills Mix Required

Skills	Staff Weeks (Years 1–4)				Trips (Years 1–4)				Location
Task team leader	8	8	8	8	4	4	4	4	Brasília
Co-task team leader	5	5	5	5	2	2	2	2	Washington, D.C.
Education specialist	4	4	4	4	2	2	2	2	Brasília
Health specialist	4	4	4	4	2	2	2	2	Brasília
Water specialist	4	4	4	4	2	2	2	2	Washington, D.C.
Land management specialist	4	4	4	4	2	2	2	2	Washington, D.C.
Rural development specialist	4	4	4	4	2	2	2	2	Brasília
Public sector specialist	3	2	2	2	2	2	2	2	Brasília
Financial management specialist	3	3	3	3	2	2	2	2	Brasília
Procurement specialist	4	4	4	4	2	2	2	2	Brasília
Environment specialist	2	2	2	2	2	2	2	2	Brasília
Social specialist	4	4	4	4	2	2	2	2	Brasília

Annex 6: Alignment of Proposed IPF and DPL, Results Chains

GoPi / PPA 2016-19 Pillars	Proposed DPL	Proposed IPF	Result Indicators
Human Development with emphasis in education, health and security	Create a financial incentive program for students enrolled in state public schools in the poorest municipalities to complete secondary education (SE) and participate in extracurricular activities.	Reduce the dropout rate in public SE by: (a) expanding a financial incentive program for secondary school students in targeted municipalities; (b) expanding the full-time school model; (c) expanding the three existing modalities of STE; (d) increasing and improving distance learning for SE; and (e) reestablishing a state student assessment.	<u>DPL</u> : Positive difference – measured by percentage points – between pass rate in the municipalities targeted by the “Poupança Jovem” Program and the average pass rate of state public SE schools (excluding Teresina). <u>IPF</u> : Dropout rate in public SE.
	Establish a program to implement strategic actions to prevent, control and respond to neglected diseases, particularly Chagas disease, hanseniasis, tuberculosis, Leishmaniasis and geohelminthiasis that mostly affect the poorest group.	Increase access to diagnosis and treatment for patients with chronic diseases: (a) implementing and making operational five SCCDs and (b) developing and implementing state protocols and medical regulation.	<u>DPL</u> : Proportion of cured patient against tuberculosis and hanseniasis in targeted municipalities; and proportion of captured vectors examined to detect parasite of Chagas disease. <u>IPF</u> : Patients under diagnosis or treatment for chronic diseases in the 5 new SCCDs.
Diversified economic development with social inclusion and sustainability / Infrastructure investments for sustainable territorial development	The state has established the legal basis to implement a water users registry in order to improve water resources management by gathering information on water resources use in the state.	Expand the registration of water users in rural areas through: (a) the design and implementation of water users registration campaigns, including outreach, dissemination, support to small-farmers to access the registry web-based platform and verification of uploaded information in CERH by desk review and field visits; and (b) strengthening SEMAR’s capacity to analyze and oversee water use right applications in Piauí.	<u>DPL</u> : Number of groundwater users whose information is registered in the state water users’ registry and quarterly update and public disclosure of a list of the state groundwater users not complying with legislation related to state water users’ registry and grant of water use rights. <u>IPF</u> : Groundwater users registered in the CERH and verified by SEMAR.
	Adopt the legal basis to facilitate the access of small-scale and subsistence farmers to public services associated with natural resources management.	Expand land tenure regularization through the: (a) strengthening and modernization of INTERPI; (b) identification, demarcation and registration of state land; (c) land tenure regularization of INTERPI’s land reform settlements; (d) land tenure regularization of <i>Quilombola</i> territories; and (e) operationalization of the Land Tenure Regularization Center of the Office of the Inspector General of the State Secretariat of Justice.	<u>DPL</u> : New applications submitted by small scale and subsistence farmers that are jointly processed by INTERPI and SEMAR. <u>IPF</u> : Beneficiaries who receive registered land titles through the state land tenure regularization program.

	Reform the Rural Poverty Reduction Program (PROGERE) in order to prioritize women and extremely poor producers as beneficiaries and to improve transparency of the Program's processes.	Increase the participation of poor rural women and <i>Quilombola</i> communities in productive value chains by: (a) creating market-driven diversification via agricultural and non-agricultural productive chains, promoting environmentally sustainable practices and targeting poor farmers, especially women and <i>Quilombola</i> communities; and (b) capacity building on technical and managerial assistance and logistics.	<u>DPL</u> : Percentage of selection and implementation process of PROGERE-financed Projects through a computerized management system and public disclosure of relevant information. <u>IPF</u> : Poor rural women and <i>Quilombola</i> communities participating in PIPs.
Efficient Public Management	Establish (i) the legal basis for the implementation of a results-based Integrated System of Planning, Monitoring, and Evaluation for investment programs; (ii) the rules and procedures for executing, monitoring and evaluating investment Projects and programs; and (iii) a decentralization of monitoring responsibilities to line secretariats. Establish the legal basis and procedures for the implementation of a systematic monitoring of contracts (<i>convenios</i>) for targeted activities financed through federal grants.	Provide technical assistance for public sector management to modernize expenditure and investment management by: (a) integrating planning, monitoring and evaluation in a single results-based system; (b) expansion of the scope and coverage of the monitoring of investment programs; (c) implementation of streamlined FM and auditing practices in line with federal and international standards; and (d) standardization of costing and procurement processes.	<u>DPL</u> : Percentage of agreements (<i>convenios</i>) for targeted activities financed through federal grants monitored through SIMO. <u>IPF</u> (intermediate indicators): - State secretariats and agencies using SIMO. - State secretariats with decentralized monitoring and evaluation teams in operation.
	Adopt the legal basis to operationalize the State Coordination Agency for Policies on women (CEPM), in order to mainstream a gender perspective into the design, implementation and supervision of State public policies.	Provide technical assistance to generate evidence to support gender-smart policymaking through: (a) a socioeconomic diagnostic of key challenges faced by women and men to reach gender equality in the state of Piauí; (b) regional and state level workshops with key stakeholders; (c) support for Governmental Organizations of Policies for Women (OPMs); and (d) an in-depth and gender-sensitive assessment of the productive chains prioritized by PROGERE II.	<u>DPL</u> : Number of strategic thematic programs included in the state PPA with gender-based indicators. <u>IPF</u> (intermediate indicators): First state plan of policies for women
	Adopt the legal basis to facilitate the access of poor citizens to the Ombudsperson Office (OGE) services and to expedite the response from targeted sectoral agencies to complaints associated with social and productive inclusion services.	Provide technical assistance to enhance citizen engagement and social accountability to: (a) enhance the OGE's channels and procedures for filing and handling complaints (b) improve the institutional capacity of sectoral secretariats to handle complaints and integrate the Ombudsman's network, and (c) launch an awareness-raising and communication campaign about the Ombudsman's network, its role and goals.	<u>DPL</u> : Number of priority sectors of the State Government with OGE representatives. <u>IPF</u> (intermediate indicator): Complaints registered and processed timely by the OGE